

HARMONY GROVE VILLAGE

APPENDIX S

WATER SUPPLY ASSESSMENT AND VERIFICATION REPORT

VTM 5365; GPA 04-04; MUP 04-012, MUP 04-013, and MUP 04-014;
REZ 04-010; SP 04-03; Log No. 04-08-011; SCH No. 2004071004

for the

DRAFT ENVIRONMENTAL IMPACT REPORT
AUGUST 2006

Rincon del Diablo Municipal Water District
WATER SUPPLY ASSESSMENT AND VERIFICATION
REPORT

Harmony Grove Village

November 2004



Water Supply Assessment and Verification Report

Harmony Grove Village

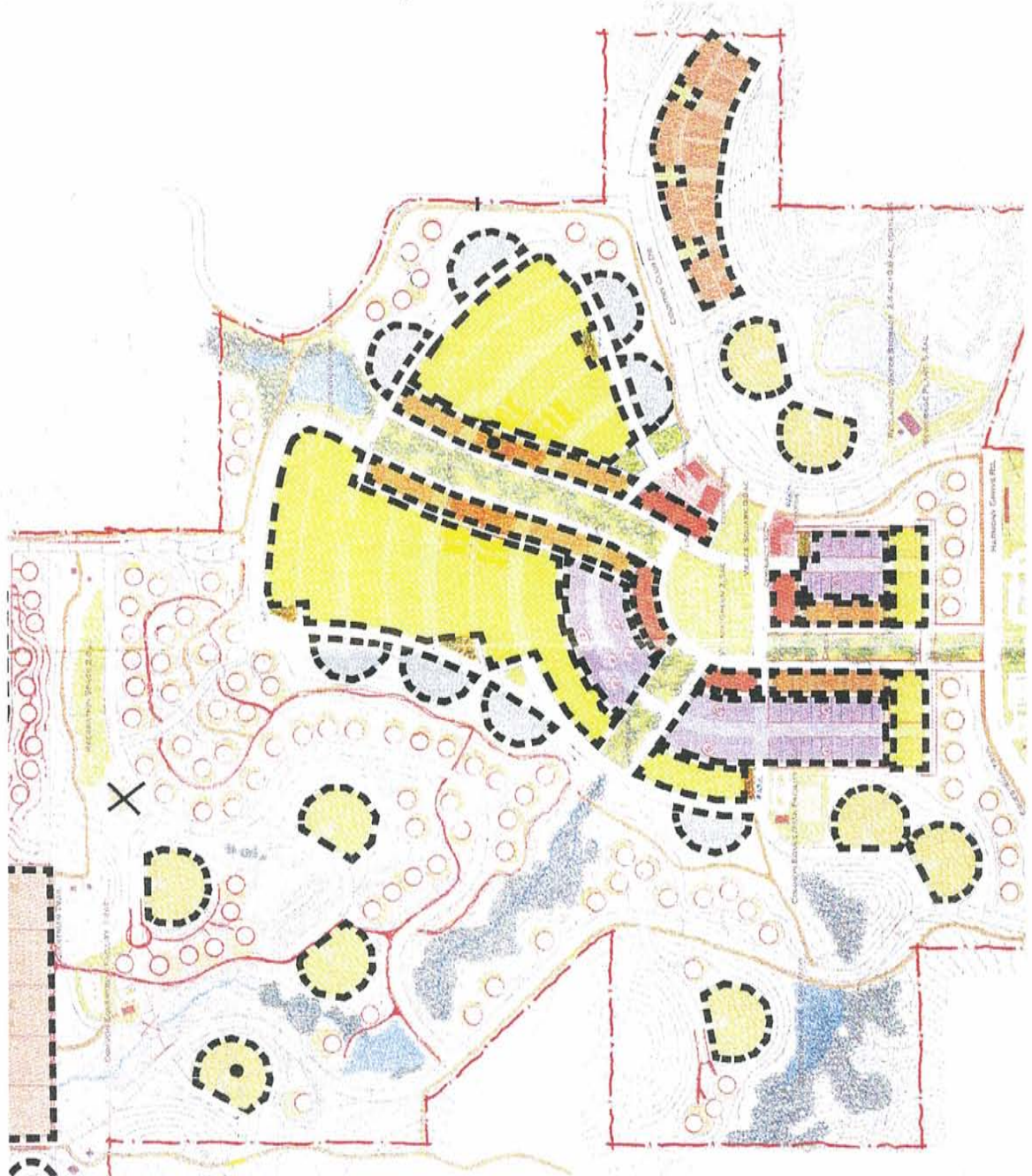


TABLE OF CONTENTS

**Rincon del Diablo Municipal Water District
Water Supply Assessment
November 2004**

Harmony Grove Village

Table of Contents

Section 1:	Purpose.....	1
Section 2:	Findings	1
Section 3:	Project Description.....	2
Section 4:	Rincon del Diablo Municipal Water District	6
	4.1 Urban Water Management Plan.....	6
Section 5:	Historical and Projected Water Demands	6
	5.1 Demand Management (Water Conservation).....	8
Section 6:	Existing and Projected Supplies.....	14
	6.1 Metropolitan Water District of Southern California	14
	6.2 San Diego County Water Authority.....	14
	6.3 Rincon del Diablo Municipal Water District.....	15
	6.3.1 Demonstrating the Availability of Sufficient Supplies and Plans for Acquiring Additional Supplies	15
Section 7:	Recycled Water	16
Section 8:	Conclusion - Availability of Sufficient Supplies	18
	Source Documents	20
Appendix A:	Harmony Grove Village- General Proximity Map	
Appendix B:	San Diego County Water Authority's 2004 Annual Water Supply Report	
Appendix C:	Agreement for Purchase of Recycled Water Between Rincon del Diablo Municipal Water District and the City of Escondido	
Appendix D:	Recycled Water Funding Agreements: Metropolitan Water District of Southern California, and San Diego County Water Authority	
Appendix E:	Joint Participation Agreement for Development of Local Recycled Water Supplies Between the San Diego County Water Authority and the Rincon del Diablo Municipal Water District	

SECTIONS 1 - 7

Rincon del Diablo Municipal Water District Water Supply Assessment and Verification Report August 2004

Harmony Grove Village

Section 1 - Purpose

This Water Supply Assessment and Verification Report (WSA&V Report) has been prepared by the Rincon del Diablo Municipal Water District (Rincon) in consultation with the San Diego County Water (Water Authority) and the County of San Diego pursuant to Public Resources Code Section 21151.9, and California Water Code Sections 10631, 10657, 10910, 10911, 10912, and 10915 referred to as SB 610 and Business and Professions Code Section 11010, and Government Code Sections 65867.5, 66455.3, and 66473.7 referred to as SB 221. SB 610 and SB 221 amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 requires that the water purveyor of the public water system prepare a water supply assessment to be included in the environmental documentation of certain proposed projects. SB 221 requires affirmative written verification from the water purveyor of the public water system that sufficient water supplies are available for certain residential subdivisions of property prior to approval of a tentative map.

The County of San Diego requested the WSA&V Report as part of the environmental review of the Harmony Grove Village project (Project). The Project description is provided in Section 3 of this WSA&V Report. The County of San Diego also requested that since the SB 610 and SB 221 requirements are substantially similar, that Rincon prepare both the Water Supply Assessment and Water Verification concurrently. This WSA&V Report is intended for use by the County of San Diego in its evaluation of the Project under the California Environmental Quality Act process. This WSA&V Report evaluates water supplies that are or will be available during normal, single-dry year, and multiple-dry water years during a 20-year projection to meet existing demands, expected demands of the Project, and reasonably foreseeable planned future water demands served by Rincon.

Section 2 - Findings

The WSA&V Report identifies that the water demand projections for the proposed Project are included in the water demand forecasts within the Urban Water Management Plans (UWMP) and other water resources planning documents of Rincon, the Water Authority, and the Metropolitan Water District of Southern California (Metropolitan). Water supplies necessary to serve the demands of the

proposed Project, along with existing and other projected future users, as well as the actions necessary to develop these supplies, have been identified in the water supply planning documents of Rincon, the Water Authority, and Metropolitan. This WSA&V Report demonstrates and verifies that with development of the resources identified that there will be sufficient water supplies over a 20-year planning horizon to meet the projected demand of the proposed Project and the existing and other planned development projects within Rincon's service area.

Based on a normal water supply year, Rincon's estimated five-year increments for a 20-year projection indicate projected potable water supply will meet the estimated water demand of 8,534.6 acre feet (af) in 2005 to 12,254.1 af in 2025. Based on dry year forecasts, the estimated water supply will also meet the projected water demand, during single and multiple-dry year scenarios. Selected at random, "2010" was used to model a single dry year (and three dry years thereafter). In this model, supply demand totals approximated 14,093.5 af; and, for multiple-dry years, supplies of 14,928.9 af, 15,230.6 af, and 15,370.0 af, respectively, would be necessary to meet demands.

Together, these findings verify that there is a sufficient water supply to serve the proposed Project and the existing and other planned projects in both normal and dry year forecasts. An adequate supply is further confirmed by the March 2003, Metropolitan produced document entitled, Report on Metropolitan's Water Supplies, A Blueprint for Water Reliability (March 2003 Report), which states that Metropolitan will have adequate supplies to meet dry-year demands within its service area over the next 20 years.

Section 3 - Project Description

The Harmony Grove Village (Project) encompasses 468 acres located approximately three miles west of Interstate 15, approximately two miles south of SR-78, and bound by the City of Escondido to the east and the City of San Marcos to the north-northwest. Locally, the project site is situated north and south of Harmony Grove Road and east and west of Country Club Drive (See Appendix A).

The project is organized into seven planning areas based upon the types of land uses proposed, as indicated in Table 1, located on page 3. The following proposed land uses are further detailed in this section: Residential, Commercial/Retail, Institutional, Open Space/Recreation, Equestrian, Landscape, and Construction/Grading.

Total water demand for the Project is estimated at 634 af per year.

Table 1: Harmony Grove Village Planning Areas

Planning Area	Acres	% of Total Acreage	Dwelling Units	Commercial/Retail (Square feet)
1. Harmony Village	81	17	370	
2. Village Center	12	3	32	41,500 sq ft.*
3. South Creek	30	6	16	
4. The Hillsides	140	30	130	
5. The Groves	84	18	112	
6. East Village	84	18	79	
7. Equestrian Ranch	37	8	3	
Total	468	100%	742	41,500 sq ft.

*Includes 25,000 square feet of general commercial (retail/office) and another 15,000 square feet of live/work space.

- **Residential:** Projected water use for the residential sector is estimated to be 530.5 af per year. This includes a variety of market rate (for sale), single-family, detached residential unit types ranging from low density, large lots in the Groves planning area to live/work dwellings in the Village Center. Lot sizes vary between 2,200 square feet to over two acres. Homes vary in size from approximately 1,500 to 5,000 square feet. A total of 32 dwelling units are proposed within the Village Center as part of the live/work mixed use area. The number of units per acre varies throughout the project site, with the overall gross density within the project not exceeding 1.6 dwelling units per acre. Proposed residential units will vary in architecture with maximum building heights at 30-feet to three stories.
- **Commercial/Retail:** Projected water use for the commercial/retail sector is estimated to be 9.1 af per year. This includes limited supporting commercial and retail uses located within the Village Center (Planning Area 2) and consisting of establishments that would support primarily the Harmony Grove Village residents such as a general store, retail uses, business offices, etc. The total gross acreage for office/retail use is two acres, not including the land proposed for the live/work buildings noted above. Approximately 25,000 square feet is proposed for the commercial/retail uses, with another 16,500 square feet anticipated within the live/work units. The on-site commercial and retail land uses are not solely for use by the Harmony Grove Village but are expected to attract a minimal number of residents from outside the Village.

Some retail sales are anticipated to be related to the proposed equestrian facilities within the Village, including sales associated with horse boarding, training, and showing. Refer to Equestrian Facilities for further description of these proposed uses.

Three equestrian facilities are proposed within the Project: 1) the 37-acre Private Equestrian Ranch (PER) located in Planning Area 7 south of Harmony Grove Road; 2) a four-acre equestrian facility within Planning Area 3 (South Creek); and, 3) a two-acre equestrian facility within Planning Area 4 (The Hillsides). The PER

is proposed to accommodate up to 80 horses for boarding and training and will include the following land uses: grass pasture, grass field, schooling ring, hunter ring, dressage arena, mare motel, main barn, dirt paddocks, hot walker, and show arena. Along with the proposed horse facilities, two single-family residences are proposed in addition to the existing home located in this area.

Employees anticipated to operate the PER include: two independent contracting trainers (not living on-site), and one resident ranch manager (living on the premises). Riding and training will be limited to daylight hours.

It is anticipated that approximately six times per year the PER will host a horse show for up to 120 horses for each show. This is in addition to the 80 horses boarded on-site. The shows are expected to last approximately three days across the weekend. Horse shows will require a temporary public address system. Temporary portable stalls set up near the show arenas in the southeast corner of the PER will accommodate horse boarding during these events.

Parking and access roads within the eastern portion of the PER are to be surfaced with gravel, small rock, or ground asphalt. Parking for lessons and the occasional horse show will be accommodated within Planning Area 7. On-street parking is not proposed.

The 43 acres of equestrian facilities are proposed in three locations throughout the Village, the Private Equestrian Ranch (37 acres), a two-acre equestrian facility located in Planning Area 4, and a four-acre facility located in Planning Area 3.

Limited retail activity is anticipated within the PER, providing supplies for horse boarding, training, and showing. It is expected that a maximum of 3,500 square feet will be used for retail purposes. Temporary commercial stands are also expected to be set up on show days.

A manure disposal plan is proposed to be prepared that includes manure removal twice a week via a commercial dumpster. No hazardous materials are proposed to be stored on-site. A fly/pest control system (automatic) is proposed for installation in the main barn and outside corral areas. Each arena is proposed to include a watering system to control dust.

The equestrian facilities proposed within Planning Areas 3 and 4 are proposed to consist of small community equestrian boarding and exercise facilities.

- **Institutional:** Projected water use for the institutional sector is estimated to be 2.8 af per year. Approximately 13 acres are reserved for institutional land uses: two acres for a fire station, nine acres for a proposed sewer package treatment plant, and two remaining acres for other institutional uses. The institutional land uses are located in Planning Area 6, the East Village. The proposed sewer package

treatment plant is located east of Country Club Drive and would consist of the following elements: 1) 17,000 square feet with a 20' x 50' building which would house the control room, electrical equipment, air blowers, and a small lab; 2) an effluent storage area of approximately 40' x 50'; 3) two adjacent equipment lots (15' x 50' and 20' x 50'); and, 4) a sludge bed covering an area of approximately 50' x 100'.

The plant would treat effluent from all of the Project development, with the exception of the Private Equestrian Ranch (Planning Area 7). This planning area would use a septic system for effluent treatment/disposal. The plant is anticipated to be owned and operated either by a County Sanitation District or a California Water District which would have to be formed to own and operate the facility. The sewer treatment plant is proposed to meet applicable reviewing agency standards. It will provide tertiary-treated effluent for use as recycled water for on-site irrigation. The effluent is proposed to meet Title 22, Division 4 of the California Administrative Code for irrigation reuse of recycled water.

- **Landscape:** Projected water use for the landscape sector is estimated to be 91.6 af per year. Above residential landscape water use, a total of 200 acres of open space and recreational land uses are proposed, covering approximately 42 percent of the Project area. The open space uses include the following: a) 12 acres of parks (public and private); b) 8 acres of multi-use trails; c) 91 acres of naturalized open space and transitional open space area; d) 46 acres of landscaped open space; and, e) 43 acres of equestrian facilities. The 12 acres of parkland consists of five public parks, including Village Square Park, Village Green Park, two South Creek Parks, and Hillside Park. In addition, a series of small, private homeowner's association-operated neighborhood recreation areas are planned within Harmony Village (Planning Area 1), including swimming pools, children's play areas, and passive recreational areas.

A detailed landscape plan has been developed for the Project's five major landscape zones: 1) Natural/Transitional Landscape Zone; 2) Riparian Landscape Zone; 3) Valley Landscape Zone; 4) Hillside Landscape Zone; and 5) Grove Landscape Zone. This plan also includes details relative to proposed lighting and fencing.

- **Construction/Grading:** Projected water use for this activity has not been calculated; however, proposed landform modifications include approximately 2,879,800 cubic yards of cut at a maximum cut slope ratio of 1.5:1 and approximately 2,852,500 cubic yards of fill with a maximum fill slope ratio of 2:1. Maximum cut height is expected to be 30 feet and maximum fill slope height is anticipated to be 40 feet. No retaining walls are proposed. Some blasting is anticipated for project grading, and is identified on the project-grading plan.

Section 4 – Rincon del Diablo Municipal Water District

Rincon was organized and incorporated in 1954 pursuant to the Municipal Water District Act of 1911 (Water Code §§ 71000 et seq.). In addition to water service, Rincon also provides fire protection services to a limited portion of its jurisdiction. Rincon joined the Water Authority as a member agency in 1954 to acquire the right to purchase and distribute imported water throughout its service area. The Water Authority is the agency responsible for the wholesale supply of water to its 23 member public agencies in San Diego County.

The Rincon service area (approximately 42 square miles) is located partially within the cities of Escondido, San Marcos, and San Diego, and within various unincorporated areas of northern San Diego County. The proposed Project is located within the Rincon service area.

With a current population of approximately 27,000, population growth within the Rincon service area is expected to increase to approximately 32,405 by 2015. However, by 2020, the population within Rincon's service area is estimated at 32,348. This projected decrease is attributed to urbanization trends.

Data on projected population and growth rate projections within Rincon was obtained from the San Diego Association of Governments (SANDAG) regional growth forecasts. SANDAG serves as the regional, intergovernmental planning agency that provides forecasted population and housing figures.

4.1 Urban Water Management Plan

In accordance with the California Urban Water Management Planning Act, the Rincon Board of Directors adopted an UWMP in 2000 that was subsequently submitted to the California Department of Water Resources (DWR). As required by law, Rincon's UWMP includes projected water supplies required to meet future demands through 2020. In accordance with Water Code Section 10910 (c)(2) and Government Code Section 66473.7 (c)(3), information from Rincon's UWMP has been used to prepare this WSA&V Report.

Section 5 – Historical and Projected Water Demands

The projected demands for the Rincon service area are based on the County of San Diego General Plan and Rincon staff refinements, which is incorporated into SANDAG's most recent growth forecast data, and includes figures on future population, housing, and employment. This land use information is used in the preparation of Rincon's UWMP to develop the forecasted demands. The Water Authority and Metropolitan also use SANDAG's most recent regional growth forecast to calculate future demands within their respective service areas. This provides for consistency between the retail and wholesale agencies water demand projections, thereby ensuring that adequate supplies are being planned for Rincon's existing and

future water users. In addition, SANDAG's growth forecasts are based on the land use policies of the cities and county within the San Diego County region, so planned growth is included in the water demand forecasts of Rincon. The historical and projected potable water demands for Rincon service area are shown in Table 2.

**Table 2: Historical and Projected Potable Water Demands (acre-feet)
Incorporating Water Conservation BMP Efforts**

Water Use Sectors	1990	1995	2000	2005	2010	2015	2020	2025
Single Family Residential	5,937.3	3687.0	4,801.5	5,615.5	6,587.1	7,009.2	7,458.4	7,936.3
Multi-Family Residential	---	624.3	773.6	299.2	318.4	338.8	360.5	383.6
Commercial & Industrial	66.4	746.6	975.4	1,191.6	1,701.4	1,971.4	2,097.7	2,232.1
Institutional & Governmental	0.0	57.7	83.8	79.3	87.3	92.9	98.8	105.2
Landscape	---	595.1	804.0	436.7	354.6	377.3	401.5	427.2
Agricultural	1,118.9	638.5	1,113.6	912.4	970.8	1,033.0	1,099.2	1,169.6
Total	8,121.1	6,349.2	8,551.9	8,534.6	10,019.7	10,822.6	11,516.1	12,254.1

1) Source: Rincon del Diablo Municipal Water District's UWMP and Staff calculations

The projected recycled water demands for Rincon service area are shown in Table 3.

Table 3: Projected Recycled Water Demands (acre-feet)

Water Use Sectors	2000*	2005	2010	2015	2020	2025
Single Family Residential	0	0	0	0	0	0
Multi-Family Residential	0	0	0	0	0	0
Commercial & Industrial	0	0	3,622.7	3,622.7	3,622.7	3,622.7
Institutional & Governmental	0	0	0	0	0	0
Landscape	0	306.8	451.1	451.1	451.1	451.1
Agricultural	0	0	0	0	0	0
Total	0	306.8	4,073.8	4073.8	4073.8	4073.8

Source: Rincon del Diablo Municipal Water District

*Recycled Water service begins in fiscal year 2004-05

5.1 Demand Management (Water Conservation)

Demand management, or water conservation, is frequently the lowest-cost resource available to any water agency. Water conservation is addressed in Rincon's UWMP as an element of the long-term strategy for meeting present and future water needs. The goals of the Rincon water conservation programs are to: 1) reduce the demand for imported water; 2) to contribute to a more reliable water supply; and, 3) demonstrate continued commitment to the *Best Management Practices* (BMP).

Rincon is a signatory to the *Memorandum of Understanding (MOU) Regarding Urban Water Conservation in California*, which created the California Urban Water Conservation Council (CUWCC) in 1991 in an effort to reduce California's long-term water demands. Water conservation programs are developed and implemented on the premise that water conservation increases water supply by reducing the demand on available supply, which is vital to the optimal use of the region's supply resources. Rincon participates in many water conservation programs designed and typically operated on a shared-cost participation program basis among the Water Authority, Metropolitan, and their member agencies

As a requirement for development projects within the City of Escondido and in unincorporated areas of the county, water conservation measures will be incorporated into the Project including the State mandated 14-Best Management Practices for water conservation such as installation of ultra low-flow toilets (ULFT), development of a water conservation plan for all landscape improvements, and the use of recycled water (if available), all of which are typical requirements of development projects.

Since becoming a signatory to the *MOU Regarding Urban Water Conservation in California* in 1991, Rincon has made implementation of the BMP for water conservation the cornerstone of its conservation programs, and a key element in its water resource management strategy. As a member of the Water Authority, Rincon also benefits from regional programs performed on behalf of its member agencies.

Current Rincon conservation programs are used fully by its customers, and all best management practice goals have been achieved (California Urban Water Conservation Council). The vast majority of water savings are currently obtained through conservation efforts from the residential ULFT, HEW, and large landscape programs. Rincon has planned to gradually shift emphasis towards residential landscaping and clothes washers as these programs continue to evolve. This is because opportunities for ULFT will decline and large landscape water efficiency will be increasingly emphasized and practiced. The resulting savings in supply directly relates to additional available water in the San Diego region for beneficial use within the Water Authority service area, including Rincon. In partnership with the Water Authority, the County of San Diego, and developers, Rincon's water conservation efforts are expected to grow and expand.

The BMP programs implemented by Rincon and regional BMP programs implemented by the Water Authority that benefit all member agencies, include the following:

- **BMP 1 - Water Survey Programs for Single-Family and Multi-Family Residential Customers** - The Residential Survey Program is free to residential customers, both single and multi-family, and has been available since 1991. The survey includes review of indoor water use; help with identifying indoor leaks; and, an educational packet that includes information about other water conservation programs. The survey also includes a meter leak detection test, irrigation system maintenance, an individualized seasonal watering schedules, information about proper lawn maintenance measures, and tips about low water-use landscaping when appropriate.
- **BMP 2 - Residential Plumbing Retrofit** - Rincon, in conjunction with the Water Authority, has met the 75% saturation requirement of this BMP every year since 1991. However, Rincon continued to distribute approximately 200 showerheads at outreach events and at our main office upon request throughout 2003 and into 2004.
- **BMP 3 - System Water Audits, Leak Detection, and Repair** - Rincon maintains an active distribution system auditing program. This program evaluates the system's "unaccounted for water loss" with a goal to stay under ten percent. Rincon regularly conducts ongoing internal distribution system leak detection surveys. In addition, Rincon's staff conducted a full-scale meter audit on all of its accounts during 2004.

Rincon's water meters, service line breaks, and other unusual events are not significant factors within the water distribution system. The industry standard, based on the American Water Works Association for unaccounted for water loss, is no more than 9 to 10%. Over the last five years, Rincon's unaccounted for water loss averaged 3.5% of the total supply, which is well below the industry standard thresholds.

Rincon has adopted and is currently using a wide range of operational and financial policies and practices to insure the efficient use of the available water supply. These policies and practices include: metering of all service connections, monthly monitoring of unaccounted water, aggressive reservoir maintenance, weekly monitoring and annual testing of meters that are 3" or more in size, replacing meters that are 2" or smaller every twelve years or less, daily inspection of facilities, implementation of a corrosion control program, and monitoring/prosecution of water theft.

- **BMP 4 - Metering with Commodity Rates for All New Connections and Retrofit of Existing Connections** - Rincon requires the installation of water meters on all services throughout its distribution system and includes separate meters for: single-family residential, multi-family, commercial, dedicated landscape irrigation, recycled water use, industrial, institutional, and governmental facilities.

Rincon's meter replacement, calibration, and maintenance program has been practiced for decades. The purpose is to maintain low levels of unidentified water loss. This is accomplished through scheduled meter replacement and calibration efforts. The calibration of meters that are 3" or larger are generally performed annually. Water meters that are 2" or smaller in diameter are generally replaced every ten to twelve years. Meter calibration and replacement insures that customers pay for all of the water they use, thereby encouraging conservation. Rincon will continue to install and read meters on all new and existing services and will continue enhancing its meter calibration and replacement program.

Unmetered use occurs specifically from fire hydrant use or main distribution system breaks. Water loss estimates are made for any of these occurrences. Rincon has increasing block pricing or tiered-rate structure, and offers a "frugal water user discount" as a lifeline device. Frugal water users receive a 30% discount on the prevailing meter service charge for residential single dwelling units using twelve units or less on a bi-monthly basis. A billing unit is equivalent to 1,000 gallons.

- **BMP 5 – Large Landscape Conservation Programs and Incentives** - From 1991 to 2004, large landscape (currently defined as landscape with one acre or more) irrigation surveys were available to customers at no charge through the *Professional Assistance for Landscape Management (PALM)* program, sponsored by the Water Authority. During the survey, the survey team examined the irrigation system for distribution uniformity, matched irrigation components, and controller scheduling. The team would then calculate and recommend a water budget for the site based on the size of the landscape, the plant material, and the climate.

Since the beginning of fiscal year 2004-05, and in cooperation with the Water Authority, Rincon's Large Landscape Conservation Program now includes additional incentives such as water budget site visits and funding for irrigation system retrofits and evapotranspiration controllers.

Rincon recently implemented an evapotranspiration water budget program for its agricultural water customers, and is now in the process of implementing a similar program for all dedicated landscape water meters. Water budgets for

both programs serve as “trigger” mechanisms between block pricing in Rincon’s two-tiered conservation pricing structure.

- **BMP 6 – High-Efficiency Washing Machine Voucher Program** - Since 2000, Rincon has distributed over 250 high-efficiency washer (HEW) vouchers to its customers. New technology in washing machine design provides for more efficient water use and savings. Over the past few years, an increasing number of residential customers have taken advantage of the \$125 voucher offer. HEWs installed in multi-family laundry rooms, laundromats, and commercial sites are eligible to receive a \$300 voucher through the commercial HEW program. Vouchers are offered for residential, commercial, institutional, and industrial customers.
- **BMP 7 – Public Information Programs** - Rincon promotes water conservation in coordination with the Water Authority and Metropolitan, and in some instances, in conjunction with the City of Escondido. Rincon independently distributes public information through its website, bill inserts, on-hold telephone messages, annual Consumer Confidence Report, newsletters, brochures, keynote speaker, classroom presentations, video library, and participation in year-round special events.

In addition, a “Welcome to the Neighborhood” packet is distributed to new residential customers. This welcome pack provides current rate sheets, water conservation information and opportunities, and emergency preparedness information.

- **BMP 8 – School Education Programs** - Rincon provides water conservation instruction to elementary school-aged children through its Home to Ocean – H2O and Storm Water Pollution Prevention classroom presentations. Also, in conjunction with Water Awareness Month, Rincon participates in a North Country regional poster contest. The water-related theme changes from year-to-year and is open to any 4th grade student living or attending school within Rincon’s service area.

A variety of youth programs and educator training are available for grades K-12 through the Water Authority. Available programs include: School Theater Program, Mini-Grant Program, Xeriscape Gardening Teacher Workshop, Youth Merit Patch Program, 4th Grade Presentations, and various kits and teaching guides.

- **BMP 9 – Conservation Programs for Commercial, Industrial, and Institutional Accounts** - Rincon provides vouchers for water efficient devices to its commercial, industrial, and institutional accounts through shared-funding programs with the Water Authority and Metropolitan. Vouchers are available for low-flow and waterless urinals (\$95), \$300 for commercial clothes washers

installed in laundromats and multi-family common areas, \$95 for commercial ULFTs, and \$500 for cooling tower conductivity controllers. Incentives are now also available for multi-load commercial clothes washers, pre-rinse sprayers, water brooms, and x-ray photo processing machines.

- **BMP 10 – Wholesale Agency Assistance Program** - This BMP applies only to wholesale agencies. The Water Authority provides conservation-related technical support and information to its member agencies, including ULFT and High Efficiency Clothes Washer Program vouchers, residential surveys; partial funding for water efficient devices in commercial, institutional, and industrial properties; large-turf irrigation; and conservation-related rates and pricing. The Water Authority typically manages the programs on behalf of its member agencies and contributes one-quarter of the cost for the incentive or survey. Rincon contributes another one-quarter of the cost, while Metropolitan typically provides one-half of the incentive.
- **BMP 11- Conservation Pricing** - Rincon has increasing block (or tiered rate), conservation-motivated pricing. Although rates are the same for all water users (with the exception of recycled water users), the movement between tiered pricing is specific for each water-use classification. The rates for all water-use classifications are based on accelerated block structures; as more units are consumed, a higher unit rate is charged. The recycled water rate is a flat rate, and is currently set at \$1.68 per unit (one unit equals 1,000 gallons) in order to provide an economic incentive for the use of the recycled water supply.
- **BMP 12 – Conservation Coordinator** - Rincon designated a full-time water conservation coordinator in 2000. In previous years, the position was considered part-time. Rincon also uses contracted consultants through the Water Authority to implement residential, multifamily, and commercial audits; to conduct agricultural surveys; and, to monitor the high efficiency washer and ultra low-flush toilet voucher programs.
- **BMP 13 – Water Waste Prohibition** - Rincon's Board of Directors adopted Ordinance 101.2 on June 11, 1991 which established a "no waste" policy.
- **BMP 14 – Residential ULFT Replacement Program** - Rincon established its ultra low-flush toilet (ULFT) replacement program in 1991. Residential customers are eligible to receive \$75 off the cost of a ULFT toilet. In addition, a \$95 voucher is available toward the purchase of a dual-flush toilet, which has been found to use 30% less water than a standard ULFT.

Additional conservation or water use efficiency measures or programs practiced by Rincon include the following:

- **Agricultural Water Conservation** - According to a study conducted by Mission Resource Conservation District, of the agricultural surveys conducted in North San Diego County in FY 2003-2004, 38% of the irrigation systems functioned below industry standards. In an effort to provide conservation assistance for its agricultural water users, Rincon has offered irrigation system efficiency audits for agricultural properties consisting of two or more acres since 1991. Additionally, all agricultural water users have been given evapotranspiration-based water budgets to map site-specific annual water needs.
- **Supervisory Control and Data Acquisition System** - In 2002, Rincon implemented a *Supervisor Control and Data Acquisition* (SCADA) system to control, monitor, and collect data regarding the operation of the water system. The major facilities that have SCADA capabilities are the water supply sources, pumping stations, and water storage reservoirs. The SCADA system allows for many and varied useful functions. Some of these functions allow operating personnel to better monitor the water supply source flow rates, reservoir levels, turn on or off pumping units, etc. The SCADA system aids in the prevention of water reservoir overflows and increases energy efficiency.
- **Water Conservation Ordinance** - California Water Code Sections 375 et seq. permit public entities that supply water at retail to adopt and enforce a water conservation program. The purpose of this code is to reduce the quantity of water used by the people therein for the purpose of conserving water supplies of such public entity. Rincon's Board of Directors established a comprehensive water conservation program pursuant to California Water Code Sections 375 et seq., based upon the need to conserve water supplies and to avoid or minimize the effects of any future shortage. A water shortage could exist based upon the occurrence of one or more of the following conditions:
 1. A general water supply shortage due to increased demand or limited supplies (whether caused by drought, natural disaster, or other emergency).
 2. Distribution or storage facilities of the Water Authority or other agencies becoming inadequate.
 3. A major failure of the supply storage and/or distribution facilities of Metropolitan, the Water Authority, or of Rincon occurs.
 4. Rincon finds and determines that the conditions prevailing in the San Diego County area requires available water resources be put to maximum beneficial use to the extent to which they are capable. The waste, unreasonable use, or unreasonable method of use of water shall be prevented. Conservation of such water shall be encouraged with a view

towards the maximum, reasonable, and beneficial use in the interest of the people of Rincon and for the public welfare.

- **Water Shortage Contingency Plan** – Rincon's Water Shortage Contingency Plan includes:
 - **Emergency Response Plan**
 - **Water Conservation Program** – which, upon finding an emergency and/or water shortage allows for staged, mandatory water conservation Implementation.
 - **Shortage Sharing Agreement** – memorialized in the 1999 Agreement for Purchase of Recycled Water Between the City of Escondido and the Rincon del Diablo Municipal Water District (Appendix B). v

Section 6 - Existing and Projected Supplies

Although Rincon has additional supplies and emergency backup through short-term and long-term water exchanges with neighboring water districts, Rincon's primary source of potable water is imported through the Water Authority. Rincon is a member agency of the Water Authority. The Water Authority is a member agency of Metropolitan. The statutory relationships between the Water Authority and its member agencies, and Metropolitan and its member agencies, respectively, establish the scope of Rincon's entitlements to water from these two agencies.

Rincon imports 100% percent of its potable water through one Water Authority aqueduct, referred to as Pipeline No. 1. The Water Authority in turn, currently purchases most of its water from Metropolitan. Due to Rincon's dependency on these two agencies, this WSA&V Report includes information on the existing and projected supplies, supply programs, and related projects of the Water Authority and Metropolitan along with the demands and supplies within Rincon's service area.

6.1 **March 2003 Report on Metropolitan's Water Supplies, A Blueprint for Water Reliability**

In March 2003, Metropolitan produced a document entitled, *Report on Metropolitan's Water Supplies, A Blueprint for Water Reliability* (March 2003 Report). The objective of the March 2003 Report was to provide the member agencies, retail water utilities, cities, and counties within its service area with water supply information for purposes of developing water supply assessments and written verifications. The March 2003 Report states that the approach to evaluating water supplies and demands is consistent with Metropolitan's 2000 Regional UWMP. As part of this process,

Metropolitan also uses SANDAG's regional growth forecast in calculating regional water demands for the Water Authority's service area.

Metropolitan has not yet updated the March 2003 Report and pertinent actions and activities have occurred over the past year that should be documented. To ensure a thorough analysis of the water supplies available to serve the proposed project along with existing and future water demands, supplemental information to the March 2003 Report is included in the Water Authority's 2004 Annual Water Supply Report. (Refer to Section 6.2)

6.2 Water Authority's 2004 Annual Water Supply Report

In June 2004, the Water Authority Board of Directors approved the Water Authority's *2004 Annual Water Supply Report* (Supply Report) for distribution to member agencies, the County of San Diego, and cities within the County. The purpose of the Report is to provide an annual statement regarding the Water Authority's supplies and implementation of Water Authority plans and programs to meet the future water supply requirements of its member agencies. The Supply Report contains documentation on the Water Authority/Imperial Irrigation District Water Conservation and Transfer Agreement, All American Canal and Coachella Canal Lining Projects, and planned seawater desalination facility at the Encina Power Station. In addition, the Supply Report provides documentation on Colorado River supply activities that were not included in Metropolitan's March 2003 Report. The documentation included in the Supply Report was prepared for use by the Water Authority's member agencies in preparation of the water supply assessments and written verifications required under state law. A copy of the report is included in Appendix C.

6.3 Rincon del Diablo Municipal Water District

Rincon's UWMP contains a comparison of projected supply and demands through the year 2020. Projected potable water resources to meet demands as planned are primarily supplied with imported water purchased from the Water Authority. Small quantities are also exchanged with several neighboring water districts including: the City of Escondido, Vista Irrigation District, Vallecitos Municipal Water District, and Valley Center Municipal Water District. Recycled water resources to meet projected demands as planned are to be supplied from the City of Escondido's Hale Avenue Resource Recovery Facility (HARRF) wastewater treatment plant. Rincon currently has no local supply of potable water or groundwater resources.

6.3.1 Demonstrating the Availability of Sufficient Supplies and Plans for Acquiring Additional Supplies

Section 5 subdivision 11 of the County Water Authority Act states that the Water Authority "as far as practicable, shall provide each of its member agencies with adequate supplies of water to meet their expanding and increasing needs." The Water Authority provides between 75 to 95 percent of the total supplies used by its

23 member agencies, depending on local weather and supply conditions. Historic imported water deliveries from the Water Authority to Rincon are shown in Table 4.

**Table 4: Historic Imported Water Deliveries
Rincon del Diablo Municipal Water District**

Calendar Year	Imported Water (acre feet)
1980	4,789.0 ¹
1985	6,039.1 ²
1990	8,121.1 ³
1995	6,349.2 ³
2000	8,551.9 ³

1 San Diego County Water Authority – 1980 Annual Report

2 San Diego Water Authority – 1985 Annual Report

3 Rincon del Diablo Municipal Water District

The availability of sufficient imported and regional water supplies to serve existing and planned uses within Rincon service area is demonstrated in the above discussion on Metropolitan and the Water Authority's water supply reliability. Rincon currently takes delivery of 8,711.7 af per year of supplies from the Water Authority. This is expected to increase to 11,516.1 af per year by 2020. These figures take into account the amount of local supply (i.e. conservation and recycling) that is expected to meet demands within Rincon's service area.

Section 7 – Recycled Water Supplies

Existing Recycled Water Program - In an ongoing effort to diversify the water demand within its service area, Rincon developed plans and specifications for construction of facilities to distribute recycled water within a portion of its service jurisdiction. Rincon's Recycled Water Distribution Project consists of approximately 4.5 miles of distribution pipeline, 2 pumping stations, and the conversion or installation of approximately 68 meters for measuring recycled water use. Just now available (October 2004), the recycled water will originate from the City of Escondido's HARRF and will be conveyed from the City's system to Rincon's system via an intertie. Recycled water deliveries have begun and will be phased in throughout the remainder of 2004-2005.

- **Projected Delivery Demands** - Annual water delivery demand for the existing recycled water program is estimated at 306.8 af per year in 2005 and 4,073.8 af per year in 2025 (a large jump in recycled water use will begin in 2005 with

the completion of the SEMPRA power plant and the use of approximately 3,500 af for its cooling towers).

- **Written Agreements, Contracts, or other Proof** - The supply and associated costs of deliveries of recycled water from HARRF are based on the *Agreement for Purchase of Recycled Water Between City of Escondido and Rincon del Diablo Municipal Water District* which is attached as Appendix B. This agreement provides for the purchase of recycled water from the City of Escondido at \$487 per af. The agreement became effective on February 9, 1999, with an amendment in 2003.
- **Financing** - Once recycled water deliveries begin, the capital improvement costs associated with the existing recycled water program will be financed through the recycled water meter capacity fee rate structure. Rincon's recycled water sales revenue, along with the approved Metropolitan and Water Authority recycled water sales incentive programs, will be used to pay for the wholesale cost of the recycled water supply and the operating and maintenance expenses the recycled water system facilities.

The cost of the Recycled Water infrastructure is budgeted at \$2.6 million. Funding for a portion of the project was provided by a California State Department of Water Resources Control Board grant (Proposition 13 and Proposition 50 funds) of \$426,264 and a low-interest loan in the amount of \$1,278,794. The remaining costs will be paid by District funds.

- **Federal, State, Local Permits/Approvals, and Agreements** - Rincon has in place an agreement with Metropolitan for their recycled water sales incentive program for supplies from the City of Escondido. A copy of this agreement is included as Appendix D. Rincon also has in place, a recycled water sales incentive program with the Water Authority. A copy of this agreement is included as Appendix E. All permits for the construction of the recycled water facilities to receive, store, and pump the recycled water supply have been acquired through the required planning, environmental approval, and design processes.

Rincon is required to meet all applicable federal, state, and local health and water quality requirements for the recycled water produced at the HARRF. As of October 19, 2001, Rincon is subject to *Waste Discharge Order 93-70* from the California Regional Water Quality Control Board on granted to the City of Escondido on 06/21/93. Additionally, Rincon's *Title 22 – Engineering Report for Landscape Irrigation Recycled Water Use Sites for the Rincon del Diablo Municipal Water District* was approved by the State of California – Health and Human Services Agency, Department of Health Services on 02/18/03.

Project Recycled Water Program - Although the Project will not be incorporated within Rincon's existing recycled water distribution system, the Project plan anticipates the inclusion of an onsite sewage treatment plant. It is expected that effluent from the sewage treatment plant will be treated to Title 22 standards for recycled water and used for landscape irrigation in the Project's common areas. Ownership of the Project's onsite waste water treatment plant and the amount of recycled water to be produced has yet to be determined.

Rincon's Capital Improvement Program - Rincon plans, designs, and constructs water system facilities to meet projected ultimate demands placed upon the potable and recycled water systems. In addition, Rincon forecasts needs and plans for water supply requirements to meet projected demands at ultimate build out. The necessary water facilities are constructed when development activities proceed and require service to achieve adequate cost effective water service.

New water facilities that are required to accommodate the forecasted growth within the entire Rincon service area are defined and described within the *Rincon Master Plan* (RMP). These facilities are incorporated into the annual *Rincon Capital Improvement Program* (CIP) for implementation when required to support development activities. As major development plans are formulated and proceed through the land use jurisdictional agency approval processes, Rincon prepares water system requirements specifically for the proposed development project consistent with the RMP. These requirements document, define, and describe all the water and recycled water system facilities to be constructed to provide an acceptable and adequate level of service to the proposed land uses, as well as the financial responsibility of the facilities required for service. CIP within specific improvement districts are funded through a component collected through the water meter capacity fees. Other CIP that are not related to development are funded through various Rincon revenue sources. The developer funds all other required water system facilities to provide water service to their project.

Section 8 – Conclusion: Availability of Sufficient Supplies

Rincon, Metropolitan, and the Water Authority have all developed plans and are implementing projects and programs to ensure that the existing and planned water users within Rincon's service area have an adequate supply. The forecasted water demands are compared with projected supplies within Rincon's service area in Table 5 on page 19. This demonstrates that with implementation of the projects discussed in the three agencies planning documents there will be adequate water supplies to serve the proposed Project development along with existing and other future planned uses.

Table 5 - Rincon Projected Water Supply and Demand during Normal Year for Period 2005 to 2025 (af per year)

Supply Source	2005	2010	2015	2020	2025
Imported Water Supply	8,534.6	10,019.7	10,822.6	11,516.1	12,254.1
Local Recycled Water Supply	306.8	4,073.8	4,073.8	4,073.8	4,073.8
Total Available Supply	8,841.4	14,093.5	14,896.4	15,589.9	16,327.9
Total Projected Demand	8,841.4	14,093.5	14,896.4	15,589.9	16,327.9

Source: Rincon del Diablo Municipal Water District

The normal, single, and multiple dry-year scenarios, within a 20-year projection, are shown in Table 6, and adequately demonstrate that supplies will be adequate to meet future demands in dry-year periods for Rincon. Hot, dry weather may generate urban water demands that are about 7%* greater than normal. This percentage was used to generate the dry year demands shown in Table 6. No extraordinary conservation measures, beyond Best Management Practices implementation, are reflected in the demand projections. The recycled water supplies are assumed to experience no reduction in a dry year. An adequate supply is further confirmed within Metropolitan's March 2003 Report, within which it states that they will have adequate supplies to meet dry year demands within its service area over the next 20 years.

Table 6: Rincon Projected Water Supply and Demand during Single and Multi-Year Dry Period (ac-ft per year)

Supply Type	Normal Water Year (2010)	Single Dry Water Year (2010)	Multiple Dry Water Years		
			Year 1 (2011)	Year 2 (2012)	Year 3 (2013)
Imported Water	10,276.0	10,995.3	10,854.9	11,156.6	11,296.0
Local Recycled Water	4,074.0	4,074.0	4,074.0	4,074.0	4,074.0
Local Groundwater	0.0	0.0	0.0	0.0	0.0
Total Supplies Available	14,350.0	15,069.3	14,928.9	15,230.6	15,370.0
Total Projected Demand	14,093.5	15,069.3	14,928.9	15,230.6	15,370.0

Source: Rincon del Diablo Municipal Water District

This WSA&V Report demonstrates and verifies that with development of the resources identified that there will be sufficient water supplies over a 20-year planning horizon to meet the projected demand of the proposed Project and the existing and other planned development projects within Rincon.

*Source: Weather-Related Water Demand Variability in Metropolitan Water District Service Area, 09/1990

SOURCE DOCUMENTS

Source Documents

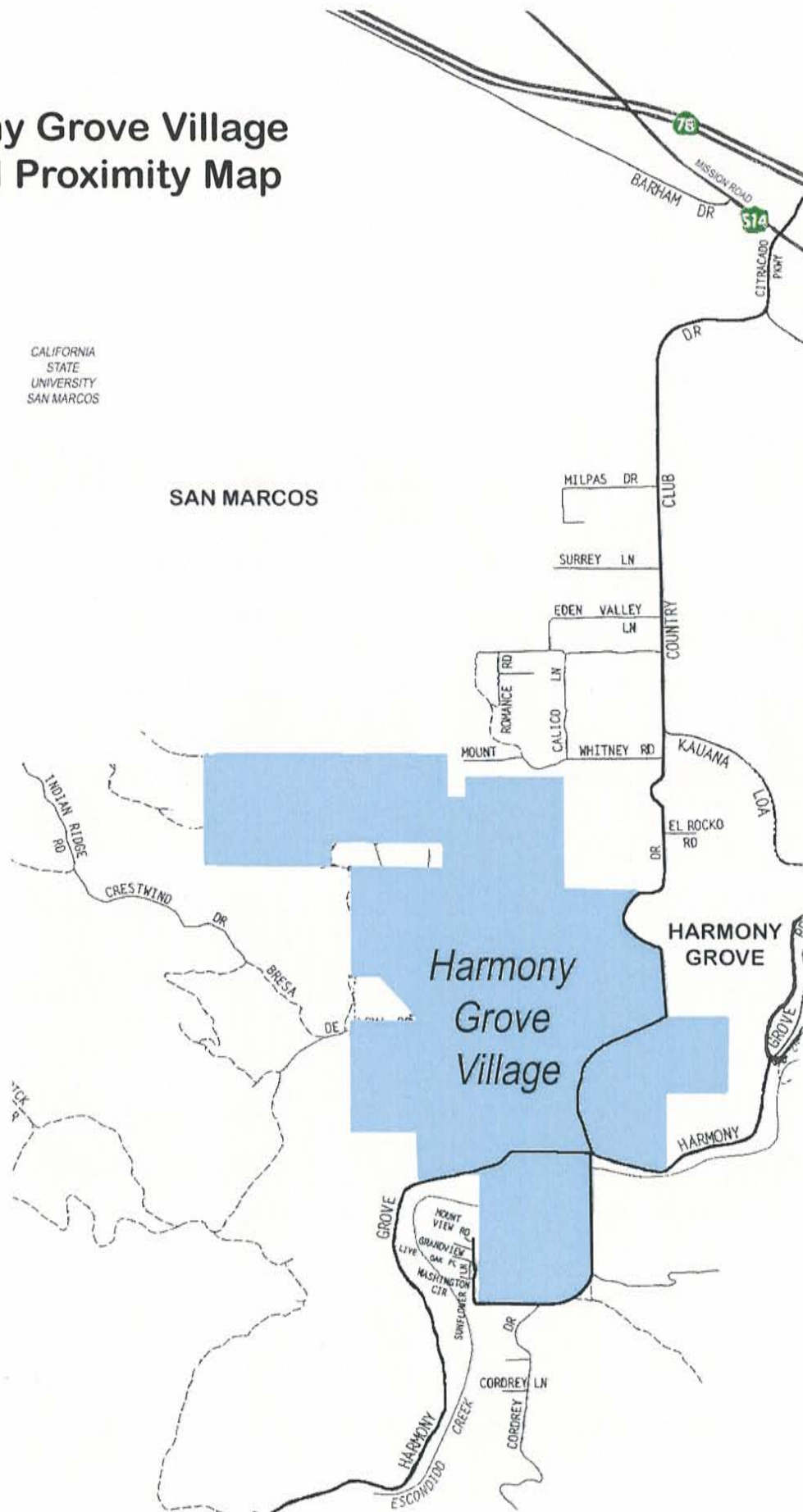
Rincon del Diablo Municipal Water District. 2000. Urban Water Management Plan.
San Diego County Water Authority. 2000. Urban Water Management Plan.
San Diego County Water Authority. FY 2004 & FY 2005. Operating and CIP Budget.
Metropolitan Water District. 2000. Regional Urban Water Management Plan.
Metropolitan Water District. 2003. Report on Metropolitan's Water Supplies, A
Blueprint for Water Reliability.
Metropolitan Water District. FY 2004. Annual Budget, Capital Investment Plan.

APPENDIX A

Harmony Grove Village General Proximity Map

CALIFORNIA
STATE
UNIVERSITY
SAN MARCOS

SAN MARCOS



APPENDIX B

AGREEMENT FOR PURCHASE OF RECYCLED WATER
BETWEEN CITY OF ESCONDIDO AND
RINCON DEL DIABLO MUNICIPAL WATER DISTRICT

THIS AGREEMENT FOR PURCHASE OF RECYCLED WATER ("Agreement"), by and between the Rincon del Diablo Municipal Water District, a municipal water district organized and operating pursuant to the Municipal Water District Law of 1911, California Water Code section 71000 *et seq.* ("District"), and the City of Escondido, a California general law city ("City"), is made effective as of the 9th day of February, 1999.

RECITALS

A. The District provides potable water service to a service area consisting of approximately 31,000 acres located in the north central coastal region of the County of San Diego, State of California.

B. All of the water which the District presently receives is imported water derived from the Colorado River and the California Aqueduct systems and transported to the District by the Metropolitan Water District ("MWD") and the San Diego County Water Authority ("SDCWA").

C. The SDCWA has from time to time notified the District that existing water demands may require a reduction in the water presently being provided to the District from the SDCWA.

D. The District desires to meet the growing demand for water within its service area and to compensate for the potential reduction in future imported water by providing facilities to distribute recycled water within the water service jurisdiction of the District.

E. In order to provide recycled water within its service area, the District must secure a source of supply from existing treated wastewater and construct expensive new capital facilities to store and distribute recycled water within the service area of the District.

F. The City provides sewage collection and treatment services to the geographic area generally known as Escondido and, by agreement, treatment service for sewage generated within the City of San Diego from the area commonly known as Rancho Bernardo.

G. The City and the District have adopted a policy of encouraging the use of recycled wastewater in the region as a water conservation measure.

H. The City currently discharges approximately 14 million gallons per day ("MGD") of secondary treated wastewater from its Hale Avenue Sewage Treatment Plant ("Hale Treatment Plant") to the Pacific Ocean via the Escondido Land Outfall ("Outfall").

I. The City has agreed to design and construct recycled water facilities, meeting all standards of Title 22 of the California Code of Regulations for unrestricted body contact, at the Hale Treatment Plant with transportation of the treated effluent through a reclaimed water distribution system to a turnout location for use by the District.

J. The City has agreed to deliver peak flows up to 2.0 MGD of its Title 22 effluent from the Hale Treatment Plant and Outfall to the District so as to provide the District with a source of high quality treated wastewater in accordance with the terms of this Agreement.

K. For purposes of this Agreement, "Year" shall be defined as July 1 through June 30 of the following calendar year.

AGREEMENT

1. **Incorporation of Recitals.** The Recitals set forth above are hereby made a part of this Agreement and are incorporated herein as though set forth in full by this reference.

2. **Term.** The term of this Agreement shall be thirty-four (34) years, commencing February 9th, 1999, and ending February 9th, 2033.

3. **Extension of Term.** The District shall be entitled to extend this Agreement for additional ten (10) year periods by giving the City written notice of its desire to extend the term at least ninety (90) days in advance of the scheduled termination date. The price of Recycled Water during any extensions of the term of this Agreement shall continue to be adjusted in accordance with Section 10 of this Agreement.

4. **Quality of Recycled Water to Be Provided by City.** The City agrees to provide the District with recycled water ("Recycled Water") which meets all federal, state, and local standards for the use of recycled water for unrestricted body contact, and which complies with all requirements of Title 22 of the California Code of Regulations for unrestricted body contact. The City agrees that this Recycled Water shall meet oxidized recycled water standards as defined in Title 22, California Code of Regulations, Chapter 3, Article 1, Section 60301, Definition (n). "Oxidized wastewater" means wastewater in which the organic matter has been stabilized, is non-putrescible, and contains dissolved oxygen. The City agrees that the Recycled Water provided to the District will contain a total dissolved solids concentration not greater than 1000 milligrams per liter with a biological oxygen demand of 30 milligrams per liter, and 30 milligrams per liter of suspended solids meeting the Environmental Protection Agency's "30/30 Rule." The parties agree that this Recycled Water will meet all federal, state, and local requirements for unrestricted body contact as these requirements may change from time to time during the term of this Agreement.

5. **Cooperation to Reduce Total Dissolved Solids Concentration.** The parties agree to cooperate and to work diligently to have the City of San Diego ban self-regenerating water softeners and to require the City of San Diego to require pre-treatment of all manufacturing, business, and commercial uses so as to reduce the total dissolved solids

concentration to 900 milligrams per liter or below.

6. Design and Construction of City's Recycled Water Facilities. The City shall design and construct recycled water facilities at its Hale Treatment Plant and a distribution system (collectively, "City's Recycled Water Facilities"). The City's Recycled Water Facilities shall be capable of delivering to the District not less than 2.0 MGD during Peak Demand periods, and not less than 0.4 MGD at all other times. The City's Recycled Water Facilities shall be constructed in such a manner to provide a turnout location, acceptable to the City and the District, necessary to deliver Recycled Water from the Hale Avenue Treatment Plant to the District. All fees and costs to design, construct, own, operate, modify, maintain, and repair the City's Recycled Water Facilities shall be paid for solely by the City, and ownership of the City's Recycled Water Facilities shall be vested solely in the City. The City's Recycled Water Facilities are more particularly shown on Exhibit "A" which is attached and incorporated herein by this reference. For purposes of this Agreement, "Peak Demand" shall be defined as the maximum amount of Recycled Water used by the District in a 24-hour period.

7. Design and Construction of District's Recycled Water Facilities. The District shall design and construct recycled water facilities ("District's Recycled Water Facilities") capable of using not less than 462 acre-feet per year of Recycled Water being provided by the City in accordance with this Agreement. The design and construction of the District's Recycled Water Facilities shall be determined solely by the District so long as the District's Recycled Water Facilities are capable of using at least 462 acre-feet per year of Recycled Water from the City's Recycled Water Facilities. All fees and costs to design, construct, own, operate, modify, maintain, and repair the District's Recycled Water Facilities shall be paid for solely by the District, and ownership of the District's Recycled Water Facilities shall be vested solely in the District.

8. Quantity of Recycled Water to Be Delivered and Purchased. The City agrees to provide the District with not less than 0.4 MGD, and not less than 2.0 MGD during Peak Demand periods, of Recycled Water from the Commencement Date, as defined below, of service from the City's Recycled Water Facilities upon request from the District. The District shall purchase a minimum of 462 acre-feet of Recycled Water each year, whether or not the District actually uses this amount of Recycled Water; provided, however, that during service disruptions from any cause, the obligation of the District to purchase Recycled Water shall be suspended and the 462 acre-feet per year commitment shall be reduced pro rata based upon the number of days per year service is actually provided to the District divided by 365 days and multiplied by 462 acre-feet. "Service disruption" shall mean the inability of the City to provide 2.0 MGD of Recycled Water to the District for a period of 24 hours or longer.

Banking
If the District uses less Recycled Water during a given year than it is obligated to purchase pursuant to this section, the amount of Recycled Water purchased but not used shall be credited to the District and shall be available for use by the District in accordance with the provisions of this section in future years. The District may accumulate indefinitely a credited quantity not to exceed 924 acre-feet of Recycled Water which the City shall be obligated to deliver to the District at a price equal to the difference between the amount paid by the District for such credited quantity and the then-prevailing rate for purchases of Recycled Water by the

District under the terms of this Agreement.

9. Completion Date for City's Recycled Water Facilities. The City agrees to complete the City's Recycled Water Facilities so that it can deliver not less than 0.4 MGD of Recycled Water to the District, with a Peak Demand capacity of 2.0 MGD, and otherwise meet all requirements of this Agreement by no later than July 1, 2001. The failure of the City to complete the City's Recycled Water Facilities so that the City is capable of delivering not less than 0.4 MGD of Recycled Water daily, and 2.0 MGD daily during Peak Demand periods, by no later than July 1, 2001 ("Delivery Date"), shall constitute a material breach of this Agreement entitling the District to unilaterally terminate this Agreement by giving written notice to the City no later than 5:00 p.m. Pacific Standard Time on August 1, 2001. This right to terminate is separate from and in addition to the termination rights contained in Section 14 of this Agreement. It is the intention of the District to have all of its facilities completed by July 1, 2001. The District shall have no obligation to purchase any Recycled Water from the City until the City has completed the City's Recycled Water Facilities capable of delivering to the District not less than 0.4 MGD of Recycled Water, with a Peak Demand Capacity of 2.0 MGD.

10. Price and Payments Terms for Recycled Water. Commencing on the later of July 1, 2001, or the date the City actually begins delivering to the District not less than 0.4 MGD of Recycled Water ("Commencement Date"), the parties agree that the price per acre-foot payable by the District for Recycled Water purchased from the City shall be \$487 per acre-foot. This price per acre-foot shall remain in effect for the balance of the Year in which the City commences delivering Recycled Water to the District of the quantity and quality required by this Agreement.

Thereafter, on July 1 each year, the Consumer Price Index - All Urban Consumers (base years 1982-1984 = 100) for Los Angeles-Anaheim-Riverside, published by the United States Department of Labor, Bureau of Labor Statistics ("Index"), for the month of June immediately preceding ("Comparison Index"), shall be compared with the Index for the month of June immediately following the Commencement Date ("Beginning Index").

If the Comparison Index has increased or decreased over the Beginning Index, the price per acre-foot of Recycled Water during the next Year shall be set by multiplying the initial price per acre-foot set forth above by a fraction, the numerator of which is the Comparison Index and the denominator of which is the Beginning Index; provided, however, that the price per acre-foot of Recycled Water shall not (a) increase more than five percent (5%) from any one Year to the next Year, (b) exceed 90% of the then-prevailing SDCWA filtered non-interruptible water rate, nor (c) exceed 90% of the lowest rate charged by the City to any of its customers for Recycled Water. As soon as the adjusted price per acre-foot of Recycled Water is calculated, the City shall give the District notice of the new price per acre-foot for the next Year.

If the Index is changed so that the base year differs from that used as of the month most immediately preceding the date the term commences, the Index shall be converted in accordance with the conversion factor published by the United States Department of Labor, Bureau of Labor Statistics. If the Index is discontinued or revised during the term, such other government index or computation with which it is replaced shall be used in order to obtain substantially the same

result as would be obtained if the Index had not been discontinued or revised.

The City shall bill the District monthly for Recycled Water utilized during the preceding month computed by reading the meter for quantity and multiplying this quantity by the price per acre-foot computed in accordance with this Agreement. All such bills shall be payable within thirty (30) days following receipt by the District. If the amount of Recycled Water actually utilized by the District in any Year is less than 462 acre-feet, the balance payable by the District to meet this minimum quantity shall be billed to the District each year on July 1 of the following Year and shall be paid within thirty (30) days of receipt of the bill.

In the event of a billing dispute, the parties agree to meet and confer in an effort to resolve the dispute as quickly as possible. The City agrees to provide the District with all meter readings and data relied upon by the City in formulating the monthly bills promptly upon request.

11. Recycled Water Credits. The City understands and acknowledges that the District's financial projections require and anticipate \$350 per acre-foot of recycled water credits from the MWD and the SDCWA recycled water incentive programs. These credits consist of \$250 per acre-foot from the MWD from the Local Resources Program (June 1998) and \$100 per acre-foot from the SDCWA Recycled Water Development Fund. In order for the District's recycled water project to produce sufficient revenues to economically function, the parties agree that all credits and reimbursements paid by the MWD for the Local Resources Program (June 1998), or any successor program, and the SDCWA Recycled Water Development Fund, or any successor program, in the District's service territory shall be paid to the District in accordance with the rules and regulations of these respective incentive programs, and shall belong solely to the District. The parties further agree that the District shall be entitled to all future credits or reimbursements provided by any governmental agency for retail sales of Recycled Water within the District's service territory.

12. Water Emergency Demands. The City agrees to allow the District to purchase, in times of Water Emergencies, Available Water from the City at the then-prevailing SDCWA filtered non-interruptible water rates. For purposes of this Agreement, "Available Water" shall mean the water in the City's water system from either the SDCWA or local supplies. For purposes of this Agreement, "Water Emergency" shall mean a circumstance in which imported water deliveries to member agencies of the SDCWA are curtailed because of a natural or man-made physical disruption in the regional water delivery facilities of the SDCWA, the MWD, and/or any other entities responsible for providing water supplies to the San Diego region.

13. Water Shortages. The City agrees to allow the District to purchase, in times of Water Shortages, Available Water in an amount sufficient to make the proportional reductions in total water deliveries equal for both parties at the then-prevailing SDCWA filtered non-interruptible water rates. For purposes of this Agreement, "Water Shortages" shall mean a reduction by the SDCWA of imported water deliveries to member agencies because of drought conditions.

14. Termination of Agreement for Economic Reasons. In the event the City determines that it is not economically feasible for the City to proceed with development of Recycled Water in the manner contemplated by this Agreement, or through any alternative project for the development of Recycled Water, the City shall be entitled to unilaterally terminate this Agreement by giving written notice to the District no later than 5:00 p.m. Pacific Standard Time on July 1, 2001. The City shall have no right to terminate this Agreement under this section if it intends to proceed with the recycled water project described in this Agreement, or any alternative recycled water project as of July 1, 2001. The right of the City to terminate this Agreement as described in this section shall automatically expire on July 1, 2001, at 5:01 p.m. Pacific Standard Time, if written notice of termination is not delivered to the District by that time.

In the event the District determines that it is not economically feasible for the District to proceed with development of the District's Recycled Water Facilities contemplated by this Agreement, the District shall be entitled to unilaterally terminate this Agreement by giving written notice to the City no later than 5:00 p.m. Pacific Standard Time on July 1, 2001. The right of the District to terminate this Agreement as described in this section shall automatically expire on July 1, 2001, at 5:01 p.m. Pacific Standard Time, if written notice of termination is not delivered to the City by that time.

In the event either party elects to terminate this Agreement in accordance with this section, the terminating party shall provide the other party with the economic facts justifying termination of this Agreement as part of the termination notice. Nothing contained in this section shall be construed as allowing either party to terminate this Agreement except upon a showing that development of Recycled Water is not economically feasible at the time the termination notice is given.

15. Service Interruptions. The City agrees to notify the District, in writing, at least thirty (30) days prior to scheduling any service interruptions caused by normal repair and maintenance. The City agrees that such service interruptions shall not exceed a period of twenty-four (24) hours so as to minimize the harm to the District's retail customers. Service interruptions caused by emergencies or Acts of God shall be promptly repaired by the City, at the City's sole cost and expense, so as to minimize the period of service interruption to the District. Where the service interruption has been caused by any emergency or Act of God, the City agrees to commence the repair immediately and to complete the repair as quickly as possible so as to minimize down time. The City also agrees to promptly advise the District of the probable period of interruption after any service interruption caused by an emergency or Act of God so that the District can communicate this to its retail customers and afford alternative service where possible.

16. Approvals and Permits. Each party shall be solely responsible for obtaining all permits, contracts, approvals, easements, land rights, or other permission or consent necessary to proceed with its recycled water facilities, as contemplated by this Agreement.

17. Environmental Review. Prior to commencement of construction of any

The District, if requested by the City, agrees to have the meters independently calibrated and to provide copies of the results to the City.

22. Limitation of Use. The District acknowledges and agrees that the Recycled Water delivered by the City to the District pursuant to this Agreement has restricted uses. The District agrees to deliver this Recycled Water to selected customers for only those uses and purposes specified by state law for use of recycled water which complies with all requirements of Title 22 of the California Code of Regulations for unrestricted body contact.

23. Rights of Inspection. The District agrees to include a provision in its recycled water agreements with customers granting the City and the District the right, with prior advance notice, to enter the premises of the customer for the purposes of monitoring, sampling, analysis, and observation of the recycled water distribution facilities, as may be required by the San Diego region of the California Regional Water Quality Control Board or by any state or local health departments.

24. Miscellaneous Provisions.

a. Applicable Law. This Agreement and any disputes relating to this Agreement shall be construed in accordance with the laws of the State of California.

b. Venue. In the event of any legal or equitable proceeding to enforce or interpret the terms or conditions of this Agreement, or to obtain a judgment confirming the arbitrator's award and to enforce the judgment, the parties agree that venue shall lie only in the federal or state courts in or nearest to the North County Judicial District, County of San Diego, State of California.

c. Modification. This Agreement may not be altered in whole or in part except by a written modification executed by all the parties to this Agreement.

d. Entire Agreement. This Agreement, together with all exhibits attached hereto, contains all representations and the entire understanding between the parties with respect to purchase of recycled water from the City by the District. No other representations are intended or shall be implied. Any prior contemporaneous correspondence, memoranda, or agreements, whether oral or written, which are in conflict with this Agreement are intended to be replaced in total by this Agreement and the exhibits to this Agreement. The parties warrant and represent that there are no oral promises, representations, or agreements not contained in this Agreement.

e. Binding Effect. This Agreement shall inure to the benefit of and shall be binding upon the parties and their respective purchasers, successors, heirs, and assigns.

f. Unenforceable Provisions. The terms, conditions, and covenants of this Agreement shall be construed whenever possible as consistent with all applicable laws and regulations. To the extent that any provision of this Agreement is held to violate any applicable law or regulation, the remaining provisions shall nevertheless be carried into full force

and effect and shall remain enforceable.

g. Notices. All notices, statements, or other writings required to be given pursuant to this Agreement shall be deemed given upon posting in the United States mail or when transmitted if sent by facsimile to the following addresses or facsimile numbers:

City of Escondido
Attn: City Manager
201 North Broadway
Escondido, CA 92025-2798
Fax: 760/432-9512

Rincon del Diablo Municipal Water District
Attn: General Manager
1920 North Iris Lane
Escondido, CA 92026
Fax: 760/745-4235

Either party may change its address for notice at any time by giving written notice of the new address to the other party.

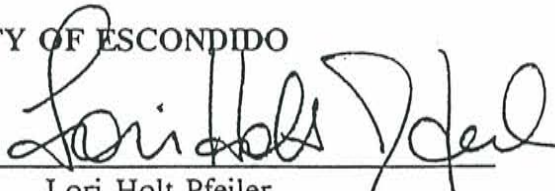
h. Attorneys' Fees. If any action or proceeding, including arbitration as provided above, is filed to challenge, invalidate, interpret, or enforce this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees and costs in addition to other relief authorized by applicable law.

i. Counterparts. This Agreement may be signed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

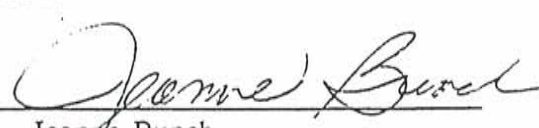
Dated: 3/10, 1999.

CITY OF ESCONDIDO

By: 
Lori Holt Pfeiler
Mayor

ATTEST:

Dated: 3/10, 1999.

By: 
Jeanne Bunch
City Clerk

RINCON DEL DIABLO
MUNICIPAL WATER DISTRICT

Dated: 3-9-99, 1999.

By: John B. Hinrichs
John B. Hinrichs
President

ATTEST:

Dated: 3-9-, 1999.

By: Frederick J. Adjarian
Frederick J. Adjarian
General Manager/Secretary

APPROVED AS TO FORM:

CITY OF ESCONDIDO

By: Steve Nelson for
Jeffrey R. Epp
City Attorney

Dated: 3-10, 1999.

REDWINE AND SHERRILL

By: 3-9-99 / J. Granito
Gilbert J. Granito
General Counsel for Rincon del
Diablo Municipal Water District

Dated: 3-9, 1999.

srh95117.doc

RESOLUTION NO. 99-19

A RESOLUTION OF THE CITY COUNCIL OF
THE CITY OF ESCONDIDO, CALIFORNIA,
AUTHORIZING MAYOR AND CITY CLERK
TO EXECUTE ON BEHALF OF THE CITY AN
AGREEMENT FOR PURCHASE OF
RECYCLED WATER BETWEEN CITY OF
ESCONDIDO AND RINCON DEL DIABLO
MUNICIPAL WATER DISTRICT

WHEREAS, the City of Escondido (City) is constructing a recycled water system; and

WHEREAS, the Rincon del Diablo Municipal Water District (Rincon) has several customers that can purchase recycled water; and

WHEREAS, the City's recycled water system will deliver recycled water to service areas of Rincon; and

WHEREAS, Rincon desires to purchase recycled water from the City and has approved the agreement providing for such purchases; and

WHEREAS, the City desires to sell reclaimed water to Rincon.

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Escondido, California, as follows:

1. That the above recitations are true.
2. That the City Council hereby approves the agreement for purchase of recycled water by Rincon.
3. That the Mayor and City Clerk are authorized to execute the agreement with Rincon for purchase of recycled water on behalf of the City. A copy of the agreement is attached as Exhibit "A" and is incorporated by this reference.


PASSED, ADOPTED AND APPROVED by the City Council of the City of Escondido at
a regular meeting thereof this 20th of January, 1999 by the following vote to wit:

AYES : Councilmembers: BEIER, KAUFMAN, PFEILER, RADY, WALDRON

NOES : Councilmembers: NONE

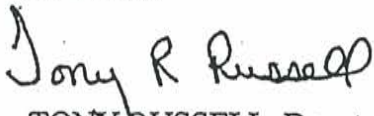
ABSENT : Councilmembers: NONE

APPROVED:



LORI HOLT PFEILER, Mayor of the
City of Escondido, California

ATTEST:



TONY RUSSELL, Deputy City Clerk of the
City of Escondido, California

2003 AMENDMENT OF RECYCLED WATER PURCHASE AGREEMENT

WHEREAS, the Rincon Del Diablo Municipal Water District ("DISTRICT") and the City of Escondido ("CITY") entered into that certain agreement entitled AGREEMENT FOR THE PURCHASE OF RECYCLED WATER on February 9, 1999 (the "Agreement"); and

WHEREAS, the AGREEMENT has provisions for purchase of 462 acre-feet of recycled water each year whether or not DISTRICT actually takes delivery of all of said water ("Take or Pay Provision"); and

WHEREAS, the CITY has experienced delays in completing the Recycled Water Facilities beyond the date contemplated in the AGREEMENT; and

WHEREAS, DISTRICT and CITY believe that extending the beginning of the Take or Pay Provision is equitable for both parties;

NOW, THEREFORE, the parties hereto agree as follows:

1. The foregoing recitals are true and correct.
2. Section 8, the First Paragraph of the agreement is changed to read:

Quantity of Recycled Water to Be Delivered and Purchased.

The City agrees to provide the District with not less than 0.4 MGD, and not less than 2.0 MGD during Peak Demand periods, of Recycled Water from the Commencement Date, as defined below, of service from the City's Recycled Water Facilities, upon request from the District. Beginning July 1, 2007, the District shall purchase a minimum of 462 acre-feet of Recycled Water each year, whether or not the District actually uses this amount of Recycled Water; provided, however, that during service disruptions from any cause, the obligation of the District to purchase Recycled Water shall be suspended and the 462 acre-feet per year commitment shall be reduced pro rata based upon the number of days per year service is actually provided to the District divided by 365 days and multiplied by 462 acre-feet. "Service disruption" shall mean the inability of the City to provide 2.0 MGD of Recycled Water to the District for a period of 24 hours or longer.

3. Remainder of Agreement Unchanged. Except as modified herein, the AGREEMENT shall remain unchanged, and shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

Date: 6-25-03

CITY OF ESCONDIDO

Lori Holt Pfeiler
Mayor

Date: 6-25-03

Marsha Whalen
City Clerk

APPROVED AS TO FORM:
OFFICE OF THE CITY ATTORNEY
Jeffrey R. Epp, City Attorney

By: Jeffrey R. Epp

Date: 6-10-03

RINCON DEL DIABLO MUNICIPAL
WATER DISTRICT

John B. Hinrichs
John B. Hinrichs
President

Date: 6-10-03

Annette Hubbell
Annette Hubbell
Secretary

APPROVED AS TO FORM:
REDWINE AND SHERRILL
Gerald Schoaf, General Counsel for
Rincon del Diablo Municipal Water District

By: Gerald Schoaf

RESOLUTION NO. 2003-112 R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ESCONDIDO, CALIFORNIA, APPROVING AND AUTHORIZING THE MAYOR AND CITY CLERK TO EXECUTE THE FIRST AMENDMENT TO THE AGREEMENT FOR RECYCLED WATER PURCHASE WITH RINCON DEL DIABLO MUNICIPAL WATER DISTRICT TO POSTPONE THE MANDATORY PURCHASE REQUIREMENTS UNTIL JULY 1, 2007

WHEREAS, the City of Escondido is constructing the Hale Avenue Resource Recovery Facility Phase II Upgrades and the Recycled Water Distribution System; and

WHEREAS, Rincon Del Diablo Municipal Water District has executed an agreement dated February 9, 1999 to purchase wholesale Recycled Water from the City of Escondido for resale; and

WHEREAS, certain conditions in said agreement require Rincon Del Diablo Municipal Water District to make mandatory purchases of at least 462 acre-feet of water each year whether or not Rincon Del Diablo Municipal Water District can resell that quantity of water; and

WHEREAS, City of Escondido desires to extend the date that those certain mandatory purchases commence until July 1, 2007; and

WHEREAS, the City of Escondido Staff have completed negotiations with Rincon Del Diablo Municipal Water District for said amendment to the exiting agreement and the Director of Public Works recommends that the First Amendment be approved; and

WHEREAS, this City Council desires at this time and deems it to be in the best public interest to approve the First Amendment to the Recycled Water Purchase

Agreement between the City of Escondido and Rincon Del Diablo Municipal Water District.

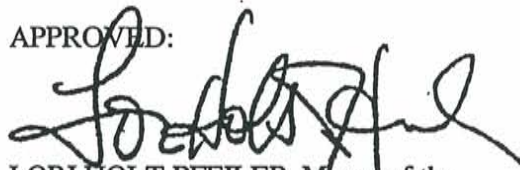
NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Escondido, California, as follows:

1. That the above recitations are true.
2. That the City Council accepts the recommendation of the Public Works Director.
3. That the Mayor and City Clerk are hereby authorized to execute, on behalf of the City, the First Amendment to the Recycled Water Purchase Agreement between the City of Escondido and Rincon Del Diablo Municipal Water District attached as Exhibit "1".

PASSED, ADOPTED AND APPROVED by the City Council of the City of Escondido at a regular meeting thereof this 28th day of May, 2003 by the following vote to wit:

AYES : Councilmembers: D'AGOSTA, GALLO, NEWMAN, PFEILER, WALDRON
NOES : Councilmembers: NONE
ABSENT : Councilmembers: NONE

APPROVED:



LORI HOLT PFEILER, Mayor of the
City of Escondido, California

ATTEST:



MARSHA WHALEN, City Clerk of the
City of Escondido, California

APPENDIX C

San Diego County Water Authority 2004 Annual Water Supply Report

Supply Reliability Through Diversification



**San Diego County
Water Authority**

June 2004

Prepared by the
Water Resources Department

Available on the Internet at
www.sdcwa.org

2004 Annual Water Supply Report

Table of Contents

Section	Page
1. Introduction.....	1
2. Regional Water Demand and Supply Overview.....	2
2.1 Regional Water Demands.....	2
2.2 Regional Water Supply Diversification.....	3
2.3 Local Water Supplies.....	4
2.3.1 Water Conservation.....	4
2.3.2 Recycled Water.....	4
2.3.3 Groundwater.....	5
2.3.4 Local Surface Water.....	6
3. Documentation for Senate Bills 610 and 221 Reporting.....	7
3.1 San Diego County Water Authority Regional Water Supplies	7
3.1.1 Availability of Sufficient Supplies and Plans for Acquiring Additional Supplies.....	7
3.1.1a Water Authority-Imperial Irrigation District Water Conservation and Transfer Agreement.....	10
3.1.1b All American Canal and Coachella Canal Lining Projects.....	13
3.1.1c Proposed Seawater Desalination Project at Encina...	16
3.1.2 Water Authority's Capital Improvement Program and Financial Information.....	17
3.2 Metropolitan Water District of Southern California 2003 Water Supply Report.....	18
3.2.1 Availability of Sufficient Supplies and Plans for Acquiring Additional Supplies.....	18

Section 1 - Introduction

The San Diego County Water Authority Administrative Code (Section 8.00.050) requires the Water Authority to provide its member agencies, the County of San Diego, and each city in the County of San Diego an annual statement regarding the Water Authority's water supplies, implementation of Water Authority plans, and programs to meet the future water supply requirements of its member agencies. This Report satisfies the Administrative Code requirements.

Section 3.1 of this Report provides documentation on the existing and planned water supplies being developed by the Water Authority, including the Water Authority-Imperial Irrigation District water transfer, All American and Coachella Canal lining projects, and seawater desalination. This documentation may be used by the Water Authority's member agencies in preparation of the water supply assessments and written verifications required under state law [Reference Water Code Sections 10910 through 10914 and Government Code Sections 65867.5, 66455.3, and 66473.7 and (commonly referred to as SB 610 and SB 221)].

Section 3.2 of this Report contains information regarding imported water supplies from Metropolitan Water District of Southern California's (Metropolitan's) 2003 Water Supply Report. When preparing the assessments and verifications for projects within its respective service areas, the Water Authority member agencies should use this Report, Metropolitan's March 2003 Report, and additional information developed by the member agency on local demands and supplies.

The Water Authority's 2000 Urban Water Management Plan (2000 UWMP) and Regional Water Facilities Master Plan (Master Plan) identify development of a diverse mix of resources to meet water supply reliability needs within the San Diego region. Development of a diverse supply provides for flexibility and adaptability in the resource mix to handle potential risks associated with managing and developing supplies. These risks could include environmental constraints, lack of political will, water supply contamination, and/or lack of funding.

Development of local supplies by the Water Authority's member agencies is a critical element to securing reliability. Therefore, Section 2.3 of this Report provides a brief discussion on the management and development of local supplies within the San Diego region compared with the supply targets included in the 2000 UWMP.

Senate Bills 610 and 221 – Water Availability and Land Use Approval

Senate Bill (SB) 610 and SB 221 amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 requires that the water purveyor of the public water system prepare a water supply assessment to be included in the environmental documentation of certain large proposed projects. SB 221 requires affirmative written verification from the water purveyor of the public water system that sufficient water supplies are available for certain large residential subdivisions of property prior to approval of a tentative map.

Section 2 - Regional Water Demand and Supply Overview

The Water Authority is a regional water agency, serving 23 member agencies within its service area (Figure 1). The Water Authority serves approximately 97% of San Diego County's population and provides 75-95% of the water utilized, depending upon the amount of local supply. The County Water Authority Act (Act), adopted by the California State Legislature, states that the Water Authority "as far as practicable, shall provide each of its member agencies with adequate supplies of water to meet their expanding and increasing needs."

2.1 Regional Water Demands

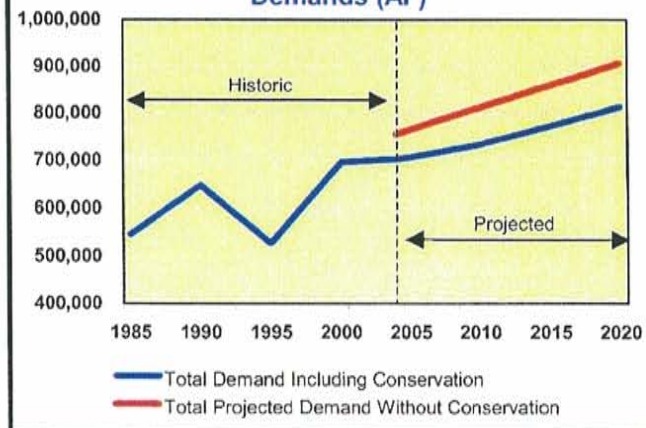
In fiscal year (FY) 2003, water demand within the Water Authority's service area was about 649,600 acre-feet (AF). Imported supplies accounted for a significant percentage of the water used during the year. This considerable dependence on water sources from outside the region is attributable to low local surface and groundwater supplies, which resulted from several years (1999 – 2002) of below-normal local rainfall. In addition, projected development of additional member agency local supplies was not fully implemented by the end of FY 2003. Although imported water demands were above projected estimates, actual total use for FY 2003 tracked slightly below projected water demands.

Figure 2 shows historic regional water demand and total normal year water demand projections, with and without conservation. Under the current forecast, which is included in the Water Authority's 2000 UWMP, water demands with conservation are projected to reach 813,000 AF by the year 2020. The Water Authority forecasts demands using its demand forecast model (CWA-MAIN), which utilizes demographic and economic data derived from the San Diego Association of Governments (SANDAG) regional growth forecast.

Figure 1
Water Authority Service Area



Figure 2
Regional Historic and Projected Normal Demands (AF)

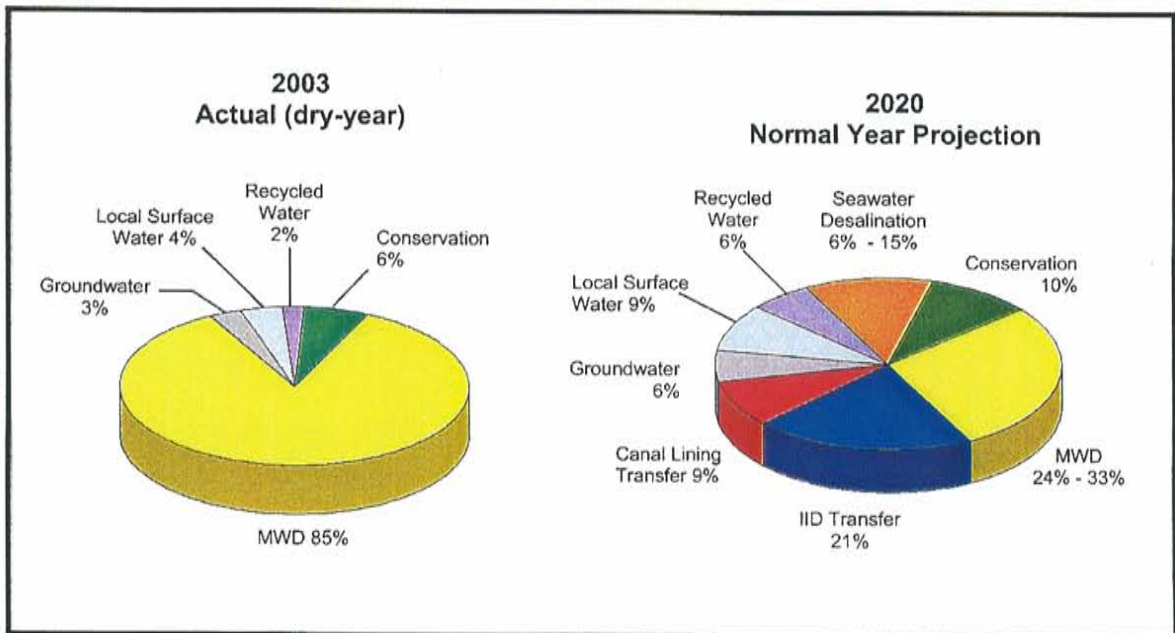


2.2 Regional Water Supply Diversification

For its first 57 years, the Water Authority purchased all its water from Metropolitan for distribution to its member agencies. Consistent with the Water Authority Act and 2000 UWMP, the Water Authority is now purchasing and delivering conserved agricultural water from the Imperial Irrigation District (IID). To further diversify the region's supply sources, the Water Authority is also implementing the All American Canal and Coachella Canal lining projects that will provide conserved water for delivery to the member agencies for 110 years. Consistent with the supply targets in the 2000 UWMP, the Water Authority is also pursuing the development of a regional seawater desalination facility within San Diego County. These supplies are discussed in detail in Section 3.1 of this Report.

The San Diego region also relies on recycled water, groundwater, surface water, and conservation to meet the growing demand for water. These supplies are developed and managed by the local agencies and are a critical component of the overall reliability for the region. Figure 3 shows the Water Authority and its member agencies' plan for diversifying supplies by 2020 to reliably meet future water demands. The Water Authority anticipates that through development of the diverse mix of resources identified in Figure 3, the region will have adequate and reliable supplies to meet the projected growth in the region.

Figure 3
Meeting the Region's Water Needs in the Year 2020



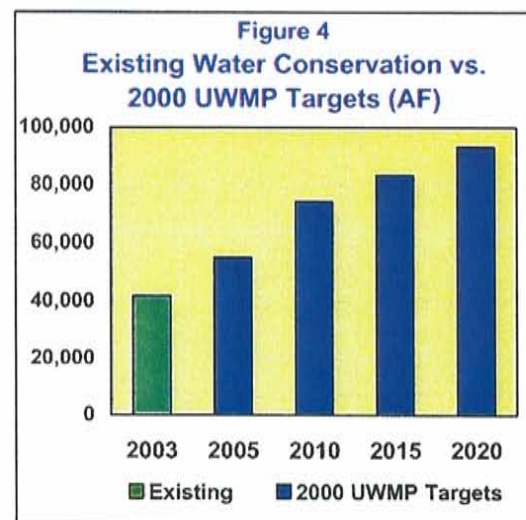
2.3 Local Water Supplies

A critical component of future reliability is development and management of local supplies and conservation programs by the Water Authority's member agencies. Development of a diverse and reliable water supply can only be obtained through a partnership between the Water Authority and its member agencies. In the Water Authority's 2000 UWMP, local supply targets were identified for water recycling, groundwater, and surface water, based on comments from member agencies. The following sections on water conservation and local supplies provide the status of the development and management of these supplies. Some of the member agencies have recently stated that the targets they provided for the 2000 UWMP are outdated and will most likely be revised downward in the 2005 UWMP.

2.3.1 Water Conservation

Water conservation, or demand management, is frequently the lowest-cost resource available to the Water Authority. Conservation reduces the amount of additional supplies the region will need to develop in the future. Between FY 1991 and FY 2003, consumers within the Water Authority's service area saved more than 280,000 AF of water through the Water Authority's and member agencies' water conservation programs. These savings have been accomplished through programs that target all customer classes (residential, agricultural, industrial, and commercial) and both outdoor and indoor water use. A complete discussion on the conservation programs is contained in the Water Authority's and member agencies' 2000 UWMPs.

The Water Authority's 2000 UWMP contained an annual conservation target of 93,200 AF of water savings by the year 2020. In FY 2003, approximately 41,816 AF of water was conserved. Figure 4 shows existing conservation savings compared with the targets included in the 2000 UWMP. Actual savings is tracking with the goals included in the plan.



To reach the water conservation targets, continued funding at the local, regional, state, and federal levels is critical, along with an increased effort to develop outdoor water conservation programs.

2.3.2 Recycled Water

In addition to water conservation, implementation of water recycling is essential to using the region's water supplies efficiently. Water recycling is defined as the treatment and disinfection of municipal wastewater to provide a water supply suitable for non-potable reuse. A separate distribution system is required to deliver recycled water to uses such as the irrigation of golf

courses, parks and schools; and filling of lakes, ponds, and ornamental fountains. Recycled water is considered a drought-proof supply.

Based on input from the member agencies, a goal of 53,400 AF of recycled water by 2020 was identified in the Water Authority's 2000 UWMP. Currently, approximately 13,180 AF of recycled water is being used within the Water Authority's service area. Figure 5 shows the current supply development level and the water recycling targets for the region. As demonstrated by the graphic, an increased emphasis from the Water Authority and member agencies must be placed on developing this supply if the 2020 target is to be met.

Currently, local agencies are confronting obstacles that are making it difficult to meet the 2000 UWMP targets for development of recycled water. The primary obstacles that have been identified by the local agencies include market acceptance, distribution costs, high salinity levels, and lack of funding.

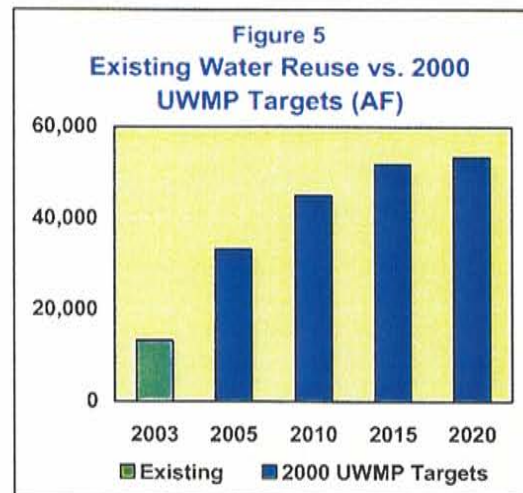
The Water Authority and its member agencies are taking steps to overcome the constraints associated with developing this supply. Recently, the Water Authority secured grant funding from both the State Water Resources Control Board and the Bureau of Reclamation to prepare a study that will provide specific recommendations for overcoming the obstacles that inhibit opportunities to maximize the beneficial use of recycled water. Grant funds will also be used to provide funding for local water recycling facilities planning and/or feasibility studies.

In addition, the City of San Diego is preparing a Water Reuse Master Plan 2005 to evaluate all aspects of a viable increased water reuse program, including but not limited to: 1) groundwater storage; 2) expansion of existing distribution system; 3) reservoirs for reclaimed water; 4) live stream discharge/wetlands development; and 5) reservoir augmentation.

2.3.3 Groundwater

Management and development of groundwater supplies in the San Diego region is critical to the goal of diversifying the region's water resources. While supplies are limited due to geology and the semi-arid hydrologic conditions of the region, local agencies are taking actions to develop the supplies that are available. Once treated, groundwater is suitable for drinking and can be delivered directly into an agency's potable water distribution system.

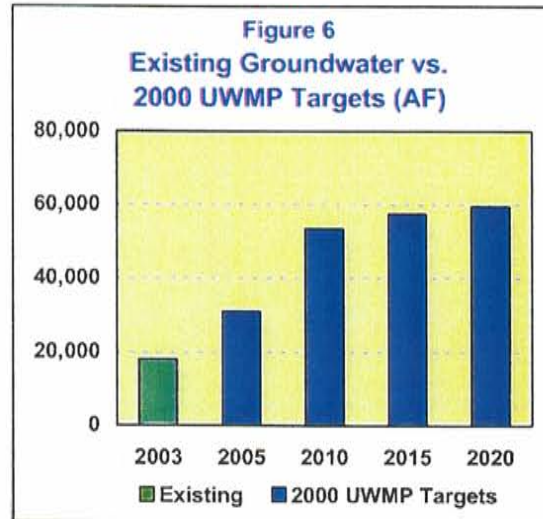
Based on input from the member agencies, a goal of 59,500 AF of groundwater by 2020 was identified in the Water Authority's 2000 UWMP. Currently, approximately 18,144 AF of groundwater is being used within the Water Authority's service area. In addition, private well owners also draw on local basins, but the amount has not been accurately quantified for the



region. Figure 6 shows the current reported groundwater yield for the region and projected supply targets. As demonstrated by the graphic, a continuing emphasis from the Water Authority and member agencies must be placed on developing this supply to meet the 2020 target.

The challenges agencies face in implementing groundwater projects in the San Diego region include high saline water, resolution of water rights issues, lack of funding, and environmental and regulatory constraints.

The Water Authority, in close coordination with the City of Oceanside, is evaluating a potential groundwater storage and recovery project (conjunctive use) in the Lower San Luis Rey River Valley (Mission Basin). The feasibility study will identify project facilities, costs, and should be completed by mid-2004. Information from the study, and development of the project, will assist local agencies in developing similar projects in the coastal groundwater basins in San Diego County.



2.3.4 Local Surface Water

Surface water was the primary source of the region's water supply until imported water was made available in 1947 and is still considered an essential supply for the San Diego region. Surface water is defined as the rainfall runoff water captured in local reservoirs, which is treated to provide a water supply suitable for potable use. Surface water yields are highly variable since they are linked to fluctuations in hydrological cycles.

In the Water Authority's 2000 UWMP, a normal yield of 85,600 AF (based on a historic 24-year average) was used for planning purposes. Since 1980, annual surface water yields have ranged from a low of 21,000 AF to a high of 140,000 AF. Due to several years of below normal rainfall, the region used only 31,448 AF of surface water in FY 2003.

Maintaining water quality of the region's local surface reservoirs is critical to the reliability of this supply. Source water protection is considered a key element in protecting water quality. Member agencies and the Water Authority are working together to ensure that the protection of drinking water quality is included in land use policies and plans, and watershed management programs within San Diego County.

Section 3 - Documentation for Senate Bills 610 and 221 Reporting

3.1 San Diego County Water Authority Regional Water Supplies

The Water Authority has adopted plans and taken specific actions to develop adequate water supplies to help meet existing and future water demands within the San Diego region. This section contains details on the supplies being developed by the Water Authority. A summary of recent actions pertaining to development of these supplies includes:

- In accordance with the Urban Water Management Planning Act, the Water Authority adopted an UWMP in December 2000 that identifies a diverse mix of local and imported water supplies to meet future demands.
- In December 2003, the Water Authority certified a program environmental impact report for its Master Plan that identified development of seawater desalination as the preferred alternative to assist in meeting future regional demands. Work on the environmental documentation for a facility at the Encina Power Station has been initiated.
- Deliveries of transfer water from IID to San Diego County began in 2003.
- As part of the October 2003 Quantification Settlement Agreement, the Water Authority was assigned Metropolitan's rights to 77,700 AF of conserved water from the All American Canal and Coachella Canal lining projects. The Water Authority has begun implementation of these projects.

Through implementation of the Water Authority and member agency planned supply projects, along with reliable imported water supplies from Metropolitan, the region anticipates having adequate supplies to meet existing and future water demands.

To ensure sufficient supplies to meet projected growth in the San Diego region, the Water Authority uses SANDAG's most recent regional growth forecast in calculating regional water demands. The existing and future demands of the member agencies are included in the Water Authority's projections.

3.1.1 Availability of Sufficient Supplies and Plans for Acquiring Additional Supplies

The Water Authority currently obtains imported supplies from Metropolitan and an increasing amount of conserved agricultural water from IID. There are 27 member agencies that purchase supplies from Metropolitan; the Water Authority is Metropolitan's largest customer. The historical annual imported water deliveries from Metropolitan are contained in Section 2.3 of the Water Authority's 2000 UWMP.

Section 135 of Metropolitan's Act defines the preferential right to water for each of its member agencies. As calculated by Metropolitan, the Water Authority currently has a preferential right to about 15.54% of Metropolitan's supply, but accounts for approximately 28% of Metropolitan's water sales. Under preferential rights, Metropolitan could allocate water without

regard to historic water purchases or dependence on Metropolitan. The Water Authority and its member agencies are taking measures to reduce its dependence upon Metropolitan through development of additional supplies and a water supply portfolio that would not be jeopardized by a preferential rights allocation. Metropolitan has stated, consistent with Section 4202 of its Administrative Code, that it is prepared to provide the Water Authority's service area with adequate supplies of water to meet expanding and increasing needs in the years ahead. When and as additional water resources are required to meet increasing needs, Metropolitan says it will be prepared to deliver such supplies. To seek clarification regarding the current application and legality of Section 135, the Water Authority board of directors voted in April 2004, to appeal a recent appellate court ruling that preserves Metropolitan's preferential right process. The board of directors authorized staff to petition for review by the State Supreme Court. The petition was filed on May 4, 2004.

The Water Authority has made large investments in Metropolitan's facilities and will continue to include imported supplies from Metropolitan in the future resource mix. As discussed in the Water Authority's 2000 UWMP, the Water Authority is planning to diversify its supply portfolio and reduce purchases from Metropolitan.

Implementation of water conservation measures within the Water Authority's service area is one of the most cost-effective means of reducing demands. The Water Authority's plan for achieving conservation savings and the estimated amount of future savings is discussed in detail in the Water Authority's 2000 UWMP.

To meet future demands and diversify its supplies, the Water Authority is now taking delivery of conserved agricultural water from IID, implementing the All American Canal (AAC) and Coachella Canal (CC) lining projects, and planning for the desalination of seawater. Table 1 summarizes the planned yields from these supply projects. Deliveries from Metropolitan are also included in Table 1, and are further discussed in Section 3.2 of this Report. The local supply targets were originally provided by the member agencies and are included in the Water Authority's Master Plan and 2000 UWMP.

The Water Authority's existing and planned supplies from the IID transfer, canal lining projects and seawater desalination are considered "drought-proof" supplies and should be available at the yields shown in Table 1 in both single-dry and multi-dry year scenarios. For dry-year yields from Metropolitan supplies, refer to Metropolitan's March 2003 Water Supply Report, discussed in Section 3.2 of this Report. The member agency preparing the water assessment and/or written verification will provide information on the dry-year yield from its local supplies for inclusion in the documents.

Table 1
Projected Water Supplies – Water Authority Service Area²
Normal Year (AF/year)

Water Supply Sources	2005	2010	2015	2020	2025
Metropolitan Supplies	526,000	345,400	343,400	290,800	310,900
Water Authority/IID Transfer	30,000	70,000	100,000	190,000	200,000
AAC and CC Lining Projects	0	77,700	77,700	77,700	77,700
Seawater Desalination ¹	0	56,000	56,000	56,000	56,000
Local Surface Water	85,600	85,600	85,600	85,600	85,600
Recycled Water	33,400	45,100	51,800	53,400	53,400
Groundwater	31,100	53,500	57,500	59,500	59,500
Total Projected Supplies	706,100	733,300	772,000	813,000	843,123

¹ The Water Authority is currently preparing an environmental impact report for 50 million gallons per day (mgd) seawater desalination project at the Encina Power Plant in the City of Carlsbad that will yield approximately 56,000 AF per year. According to the Water Authority's Master Plan, which has been approved for planning purposes, the facility could be expanded to 80 – 100 mgd in the future and/or other facilities constructed to increase this supply source.

² The annual supply mixes in years 2005, 2010, 2015, and 2020 are based on the Water Authority's 2000 UWMP and subsequent actions by the Water Authority board of directors. The 2025 supply mix is based on the Water Authority's Master Plan and subsequent actions by the board of directors.

As part of preparation of a written verification, an agency's shortage contingency analysis should be considered in determining sufficiency of supply. Section 6 of the Water Authority's 2000 UWMP contains a detailed shortage contingency analysis, which addresses a regional catastrophic shortage situation and drought management. The analysis demonstrates that the Water Authority and its member agencies, through the Emergency Response Plan and Emergency Storage Project, are taking actions to prepare for and appropriately handle an interruption of water supplies. The analysis also describes actions being taken by the Water Authority to firm up its supplies from Metropolitan to provide increased reliability in a drought and reduce, if not eliminate, shortages. The Water Authority, in conjunction with its member agencies, plans to develop a new drought allocation methodology in connection with the Water Authority's next UWMP update in 2005.

3.1.1a Water Authority-Imperial Irrigation District Water Conservation and Transfer Agreement

The Quantification Settlement Agreement (QSA) was signed in October 2003, and resolves long-standing disputes regarding priority and use of Colorado River water and creates a baseline for implementing water transfers. Details on the QSA are contained in Section 3.2 of this Report. With approval of the QSA, the Water Authority and IID were able to implement their Water Conservation and Transfer Agreement. This agreement not only provides reliability for the San Diego region, but also assists California in reducing its use of Colorado River water to its legal allocation.

Implementation Status

On April 29, 1998, the Water Authority signed a historic agreement with IID for the long-term transfer of conserved Colorado River water to San Diego County. Under the Water Authority-IID Agreement, Colorado River water will be conserved by Imperial Valley farmers who voluntarily participate in the program, and then transferred to the Water Authority for use in San Diego County. The water to be conserved is part of IID's Colorado River rights, which are among the most senior in the Lower Colorado River Basin.

On October 10, 2003, the Water Authority and IID executed an amendment to the original 1998 Water Authority-IID Water Transfer Agreement. The purpose of the amendment was to modify certain aspects of the 1998 Agreement to be consistent with the terms and conditions of the QSA and related agreements and to modify other aspects to lessen the environmental impacts of the transfer of conserved water. The amendment was expressly conditioned upon approval and implementation of the QSA, which was also executed on October 10, 2003.

A restructuring of the IID transfer for the first 15 years of the agreement was needed to avoid potential impacts to the Salton Sea from reduced agricultural flows to the Salton Sea that would be caused by the agricultural conservation measures in the Imperial Valley. The QSA requires that the baseline salinity levels at the Sea be maintained for 15 years while a plan to restore the Sea is developed and implemented. The amendments contemplate that IID will conduct a combined temporary fallowing and system improvement program during the first 15 years of the transfer. In the 16th year of the agreement, all temporary fallowing would end and all water for transfer would be produced through on-farm and system conservation measures.

On November 5, 2003, IID filed a complaint in Imperial County Superior Court seeking validation of 13 contracts associated with the Water Authority-IID water transfer and the QSA. Imperial County and various private parties filed additional suits in Superior Court, alleging violations of the California Environmental Quality Act (CEQA), the California Water Code, and other laws in connection with approval of the QSA, the water transfer, and related agreements. The lawsuits have been coordinated for trial. The IID, Coachella Valley Water District, Metropolitan, Water Authority, and State are defending these suits and coordinating to seek validation of the contracts. Implementation of the transfer provisions is proceeding during the litigation. For further information regarding the litigation, please contact the Water Authority's General Counsel.

Expected Supply

With execution of the QSA and related agreements, delivery of 10,000 AF of transfer water into San Diego County occurred in calendar year 2003. In accordance with the water transfer agreement with IID, 20,000 AF will be conserved and delivered to the Water Authority in 2004. The quantities will increase annually to 200,000 AF by 2021, and remain fixed for the duration of the transfer agreement. The initial term of the agreement is 45 years, with a provision that the agreement may be extended for an additional 30-year term by mutual agreement.

Transportation

The Water Authority entered into a water exchange agreement with Metropolitan on October 10, 2003, to transport the Water Authority-IID transfer water from the Colorado River to San Diego County. Under the exchange agreement, Metropolitan will take delivery of the transfer water through its Colorado River Aqueduct. In exchange, Metropolitan will deliver to the Water Authority a like quantity and quality of water. The Water Authority will pay Metropolitan's applicable wheeling rate for each acre-foot of exchange water delivered. According to the water exchange agreement, Metropolitan will make delivery of the transfer water for 35 years, unless the Water Authority elects to extend the agreement another 10 years for a total of 45-years.

Cost/Financing

The costs associated with the transfer are proposed to be financed through the Water Authority's rates and charges. In the agreement between the Water Authority and IID, the price for the transfer water will start at \$258 per acre-foot and increase each year at a set price for the first five years. The 2004 price for transfer water is \$267 per acre-foot. Procedures are in place to evaluate and determine market-based rates following the first five-year period.

In accordance with the October 2003 amended exchange agreement between Metropolitan and the Water Authority, the initial cost to transport the conserved water was \$253 per acre-foot. Thereafter, the price shall be equal to the charge or charges set by Metropolitan's board of directors pursuant to applicable law and regulation, and generally applicable to the conveyance of water by Metropolitan on behalf of its member agencies.

The Water Authority will pay IID an up-front payment of \$10 million to help offset socioeconomic impacts associated with temporary land fallowing. IID will credit the Water Authority for this up-front payment during years 16 through 45. At the end of the fifth year of the agreement, the Water Authority will prepay IID an additional \$10 million for future deliveries of water. IID will credit the Water Authority for this up-front payment during years 16 through 30.

As part of implementation of the QSA and water transfer, the Water Authority also entered into an environmental cost sharing agreement. The agreement specifies that the Water Authority will contribute \$64 million for the purpose of funding environmental mitigation costs and contributing to the Salton Sea Restoration Fund.

Written Contracts or other Proof

The supply and costs associated with the transfer are based primarily on the following documents:

- **Agreement for Transfer of Conserved Water by and between IID and the Water Authority (April 29, 1998).** This Agreement provides for a market-based transaction in which the Water Authority would pay IID a unit price for agricultural water conserved by IID and transferred to the Water Authority.
- **Amendment to Agreement between IID and the Water Authority for Transfer of Conserved Water (October 10, 2003).** Consistent with the executed QSA and related agreements, the amendments restructure the agreement and modify it to minimize the environmental impacts of the transfer of conserved water to the Water Authority.
- **Amended and Restated Agreement between Metropolitan and Water Authority for the Exchange of Water (October 10, 2003).** This agreement was executed pursuant to the QSA and provides for delivery of the transfer water to the Water Authority.
- **Environmental Cost Sharing, Funding, and Habitat Conservation Plan Development Agreement among IID, CVWD, and Water Authority (October 10, 2003).** This Agreement provides for the specified allocation of QSA-related environmental review, mitigation, and litigation costs for the term of the QSA, and for development of a Habitat Conservation Plan.
- **Quantification Settlement Agreement Joint Powers Authority Creation and Funding Agreement (October 10, 2003).** The purpose of this agreement is to create and fund the QSA Joint Powers Authority and to establish the limits of the funding obligation of CVWD, IID, and Water Authority for environmental mitigation and Salton Sea restoration pursuant to SB 654 (Machado).

Federal, State, and Local Permits/Approvals

- **Environmental Impact Report (EIR) for Conservation and Transfer Agreement.** As lead agency, IID certified the Final EIR for the Conservation and Transfer Agreement on June 28, 2002.
- **Addendum to EIR for Conservation and Transfer Agreement.** IID as lead agency and Water Authority as responsible agency approved addendum to EIR in October 2003.
- **Environmental Impact Statement (EIS) for Conservation and Transfer Agreement.** Bureau of Reclamation issued a Record of Decision on the EIS in October 2003.
- **Federal Endangered Species Act Permit.** The U.S. Fish and Wildlife Service issued a Biological Opinion on January 12, 2001, that provides incidental take authorization and certain measures required to offset species impacts on the Colorado River regarding such actions.
- **California Endangered Species Act Permit.** Application for Section 2081 permit is pending with California Department of Fish and Game.

- **State Water Resources Control Board (SWRCB) Petition.** SWRCB adopted Water Rights Order 2002-0016 concerning IID and Water Authority's amended joint petition for approval of a long-term transfer of conserved water from IID to the Water Authority and to change the point of diversion, place of use, and purpose of use under Permit 7643.

3.1.1b All American Canal and Coachella Canal Lining Projects

As part of the QSA and related contracts, the Water Authority was assigned Metropolitan's rights to 77,700 AF per year of conserved water from projects that will line the All American Canal (AAC) and Coachella Canal (CC). These projects will reduce the loss of water that currently occurs through seepage and that conserved water will be delivered to the Water Authority. This will provide the San Diego region with an additional 8.5 million AF of water over the 110-year life of the agreement.

Implementation Status

The AAC lining project is in the pre-design phase. The lining project consists of constructing a concrete-lined canal parallel to 23 miles of the existing AAC from Pilot Knob to Drop 3. National Environmental Policy Act (NEPA) and CEQA documentation is complete, environmental mitigation measures have been identified and Endangered Species Act consultations are pending. Under the current schedule, the project is expected to be completed in 2008.

The final design for the CC lining project is complete. Compliance with CEQA and NEPA has also been completed, including an amended Record of Decision by the Bureau of Reclamation. The amendment was required after the project design was revised from lining the existing canal to construction of a parallel canal. It is expected that construction should start in mid-2004 and be complete within two years, with deliveries beginning in early 2007.

Expected Supply

The AAC lining project will yield 67,700 AF of Colorado River water per year and the CC lining project will yield 26,000 AF per year. Under the October 10, 2003, Allocation Agreement, 16,000 AF per year of conserved canal lining water will be allocated to the San Luis Rey Indian Water Rights Settlement Parties. The remaining amount, 77,700 AF per year, will be available to the Water Authority beginning in approximately 2008. According to the Allocation Agreement, IID has call rights to a portion (5,000 acre-feet per year) of the conserved water upon termination of the QSA for the final 35 years of the Allocation Agreement and upon satisfying certain conditions.

Transportation

The October 10, 2003, Exchange Agreement between Water Authority and Metropolitan also provides for the delivery of the conserved water from the canal lining projects. The Water Authority will pay Metropolitan's applicable wheeling rate for each acre-foot of exchange water delivered. In the Agreement, Metropolitan will deliver the canal lining water for the term of the Allocation Agreement (110 years).

Cost/Financing

Under California Water Code Section 12560 et seq., the Water Authority would receive \$200 million in state funds for construction of the projects. In addition, under California Water Code Section 79567, \$20 million from Proposition 50 could also be available for the lining projects. Additionally, the Water Authority will receive \$35 million for groundwater conjunctive use projects as part of the agreement. The Water Authority would be responsible for additional expenses above the grant funds provided by the state.

In accordance with the amended exchange agreement between Metropolitan and the Water Authority, the cost to transport the canal lining water is equal to the charge or charges set by Metropolitan's board of directors pursuant to applicable law and regulation and generally applicable to the conveyance of water by Metropolitan on behalf of its member agencies.

In accordance with the Allocation Agreement, the Water Authority will also be responsible for a portion of the net additional Operation, Maintenance, and Repair (OM&R) costs for the lined canals. The Secretary of Interior, working with the Canal Lining Projects OM&R Coordinating Committees, will determine the additional costs of operation, maintenance, and repair of the AAC and CC.

Any costs associated with the lining projects as proposed, are to be financed through the Water Authority's rates and charges.

Written Contracts or other Proof

The expected supply and costs associated with the lining projects are based primarily on the following documents:

- **U.S. Public Law 100-675 (1988).** Authorized the Department of the Interior to reduce seepage from the existing earthen AAC and CC. The law provides that conserved water will be made available to specified California contracting water agencies according to established priorities.
- **Allocation Agreement among the United States of America, The Metropolitan Water District of Southern California, Coachella Valley Water District, Imperial Irrigation District, San Diego County Water Authority, the La Jolla, Pala, Pauma, Rincon, and San Pasqual Bands of Mission Indians, the San Luis Rey River Indian Water Authority, the City of Escondido, and Vista Irrigation District (October 10, 2003).** This agreement includes assignment of Metropolitan's rights and interest in delivery of 77,700 AF of Colorado River water previously intended to be delivered to Metropolitan to the Water Authority. Allocates water from the AAC and CC lining projects for at least 110 years to the Water Authority, the San Luis Rey Indian Water Rights Settlement Parties, and IID, if it exercises its call rights.
- **Amended and Restated Agreement between Metropolitan and Water Authority for the Exchange of Water (October 10, 2003).** This agreement was executed pursuant to the QSA and provides for delivery of the conserved canal lining water to the Water Authority.

- **California Water Code Section 12560 et seq.** This Water Code Section provides for \$200 million to be appropriated to the Department of Water Resources to help fund the canal lining projects in furtherance of implementing California's Colorado River Water Use Plan.
- **California Water Code Section 79567.** This Water Code Section identifies \$20 million as available for appropriation by the California Legislature from the Water Security, Clean Drinking Water, Coastal, and Beach Protection Fund of 2002 (Proposition 50) to DWR for grants for canal lining and related projects necessary to reduce Colorado River water use. According to the Allocation Agreement, it is the intention of the agencies that those funds will be available for use by the Water Authority, IID, or CVWD for the AAC and CC lining projects.
- **Agreement between Metropolitan and Water Authority regarding Assignment of Agreements related to the ACC and CC Lining Projects.** This agreement was executed in April 2004 and assigns rights to the Water Authority for the following agreements that had been executed to facilitate funding and construction of the ACC and CC lining projects:
 - * **California Department of Water Resources – Metropolitan Funding Agreement (2001).** Reimburse Metropolitan for project work necessary to construct the lining of the CC in an amount not to exceed \$74 million.
 - * **California Department of Water Resources – IID Funding Agreement (2001).** Reimburse IID for project work necessary to construct a lined AAC in an amount not to exceed \$126 million.
 - * **Metropolitan – CVWD Assignment and Delegation of Design Obligations Agreement (2002).** Assigns design of the CC lining project to CVWD.
 - * **Metropolitan – CVWD Financial Arrangements Agreement for Design Obligations (2002).** Obligates Metropolitan to advance funds to CVWD to cover costs for CC lining project design and CVWD to invoice Metropolitan to permit the Department of Water Resources to be billed for work completed.

Federal, State, and Local Permits/Approvals

- **AAC Lining Project Final EIS/EIR (March 1994).** A final EIR/EIS analyzing the potential impacts of lining the AAC was completed by the Bureau of Reclamation (Reclamation) in March 1994. A Record of Decision was signed by Reclamation in July 1994, implementing the preferred alternative for lining the AAC. A re-examination and analysis of these environmental compliance documents by Reclamation in November 1999 determined that these documents continued to meet the requirements of the NEPA and the CEQA and would be valid in the future.
- **CC Lining Project Final EIS/EIR (April 2001).** The final EIR/EIS for the CC lining project was completed in 2001. Reclamation signed the Record of Decision in April 2002.

An amended Record of Decision has also been signed to take into account revisions to the project description.

3.1.1c Proposed Seawater Desalination Project at Encina

A Seawater Desalination Project (Project) is being proposed that would consist of a 50 mgd reverse osmosis desalination plant sited at the Encina Power Station in the City of Carlsbad. The Project would also include the pipelines and ancillary facilities necessary to convey product water from the plant to local and regional water distribution systems.

Implementation Status

In June 2003, the Water Authority board of directors approved including the Project in the Water Authority's FY 04 and FY 05 Capital Improvement Program (CIP) Budget. Funds have been budgeted to support planning activities related to the desalination plant and distribution facilities necessary to connect the plant with the Water Authority's pipelines. A comprehensive engineering study on the distribution facilities was recently completed. The Water Authority is currently preparing an EIR and anticipates release of a public draft EIR by the end of 2005. Simultaneously with the Water Authority's efforts, Poseidon Resources LLC, of Stamford, Conn., is pursuing the implementation of a privately owned local supply project at the same location in the City of Carlsbad. The Poseidon project is also in the environmental review and planning stages.

Expected Supply

The Project is anticipated to produce 56,000 AF annually of new water supply generated from seawater drawn in by the Encina Power Station cooling water circulation system from the Pacific Ocean via the Agua Hedionda Lagoon. The Project would provide a new source of high quality water that would meet or exceed state and federal standards.

Cost/Financing

The total estimated capital cost of the Project was initially estimated at \$272 million in 2001 dollars. This cost estimate is currently being evaluated and will likely be higher based on results from the conveyance feasibility study. The Water Authority is pursuing external funding to offset the capital and operating cost of the Project, including funding through the Metropolitan's Seawater Desalination Program (SDP), state funding through the recently passed Proposition 50, as well as federal funding opportunities.

The Water Authority secured federal funding in the FY 2004 Omnibus Appropriations Act (Act) for seawater desalination development. The Act includes a provision under the VA/HUD State and Tribal Assistance Grants account program that provides \$750,000 for the Water Authority's seawater desalination program.

Federal, State, and Local Permits/Approvals

Table 2 provides a list of the major permits and discretionary actions required for the Project and the anticipated schedule for completion of the permitting process. Based on the estimated completion dates also shown in Table 2, the Water Authority anticipates the Project to be on-line in 2010.

Table 2
List of Major Permits and Discretionary Actions

Permit or Discretionary Action	Purpose	Scope	Scheduled Completion
Certification of Environmental Impact Report	Satisfy the requirements of the California Environmental Quality Act.	Those aspects of the proposed Project that may affect environmental quality.	2006
Endangered Species Act Compliance (ESA)	Satisfy ESA requirements.	Proposed distribution facilities.	2006
Domestic Water Supply Permit	Satisfy the requirements of the state and federal Safe Drinking Water Acts.	Source water and product water quality, treatment plant reliability, and monitoring program.	2006 (Conceptual approval)
National Pollutant Discharge Elimination System Permit	Satisfy the requirements of the federal Clean Water Act, California Water Code, Ocean Plan, and Comprehensive Water Quality Control Plan for the San Diego Region.	Proposed discharge of concentrated seawater to the Pacific ocean via existing cooling water discharge system.	2006
Coastal Development Permit	Satisfy the requirements of the California Coastal Act and the federal Coastal Zone Management Act.	Those aspects of the proposed Project that may affect coastal resources.	2007
Right-of-Way Acquisition for conveyance facilities	Acquire land necessary for construction of conveyance facilities.	Proposed distribution facilities.	2007

3.1.2 Water Authority's Capital Improvement Program and Financial Information

The Water Authority's annual CIP budget document includes a description of each of the projects and programs being implemented to ensure existing and future facilities are adequate to deliver water supplies throughout the region. The project costs, along with information on the activities that need to be completed, are included in the CIP document. A programmatic environmental impact report has been certified by the Water Authority board of directors for the Master Plan. The Master Plan identifies future facilities and other improvements to the Water Authority's system that are necessary to diversify supplies and maintain reliability throughout the region. Projects identified in the Master Plan will be included in the CIP based on Water Authority board of directors' approval.

One of the highest priority projects identified in the Master Plan is the development of additional treatment capacity within the region. During recent summers' the Water Authority has experienced peak-demand conditions that have slightly exceeded the regions rated treatment capacity. The Master Plan recommends development of an additional 50 million gallons per day (mgd) of treatment capacity immediately and another 50 mgd capacity by 2010. The Water Authority and its member agencies are evaluating alternatives to determine the most reliable and

cost-effective method of increasing regional treated water capacity. The Water Authority expects to select a preferred alternative by summer of 2004. In the near-term, the Water Authority and its member agencies are implementing short-term conservation programs and operational procedures to ensure adequate supplies during peak summer periods.

The Water Authority board of directors is provided a semi – annual and annual report on the status of development of the CIP projects. As described in the Water Authority's budget, a combination of long- and short-term debt and cash (pay-as-you-go) will provide funding for capital improvements. Additional information is included in the Water Authority annual budget. The Water Authority's annual report also contains selected financial information and summarizes the Water Authority's investment policy.

3.2 Metropolitan Water District of Southern California 2003 Water Supply Report

In March 2003, Metropolitan produced a document entitled, *Report on Metropolitan's Water Supplies, A Blueprint for Water Reliability* (March 2003 Report). The objective of the March 2003 Report is to provide the member agencies, retail water utilities, cities, and counties within its service area with water supply information for purposes of developing water supply assessments and written verifications. The March 2003 Report states the approach to evaluating water supplies and demands is consistent with Metropolitan's 2000 Regional UWMP. As part of this process, Metropolitan utilizes SANDAG's regional growth forecast in calculating regional water demands for the Water Authority's service area.

3.2.1 Availability of Sufficient Supplies and Plans for Acquiring Additional Supplies

Metropolitan is a wholesale supplier of water to its member public agencies and obtains its supplies from two primary sources: the Colorado River, via the Colorado River Aqueduct (CRA), which it owns and operates, and Northern California, via the State Water Project (SWP). The purpose of the March 2003 Report is to document the availability of these existing supplies and additional supplies necessary to meet future demands. Metropolitan has not yet updated the March 2003 Report. To ensure a thorough analysis of the water supplies available to serve existing and projected growth, supplemental information to the March 2003 Report is included in the following paragraphs.

Colorado River Aqueduct Deliveries

The March 2003 Report includes a description of Metropolitan's 550,000 AF per year basic annual apportionment water (Priority 4) along with the Colorado River supply projects that are necessary to maintain a full CRA. One of the actions that were finalized following distribution of the March 2003 Report is approval of the QSA and other related agreements. Signing of the QSA and related agreements will now allow implementation of Colorado River supply projects identified in Metropolitan's March 2003 Report. Information on these activities is discussed below.

The QSA is an integral part of California's Colorado River Water Use Plan to reduce dependency on Colorado River supplies. The QSA resolves long-standing disputes regarding

priority and use of river water and creates a baseline for implementing water transfers. Implementation of the QSA also enables California to receive the benefit of special surplus criteria for Colorado River supplies to significantly increase the probability of surplus deliveries and provide a “soft-landing” for California while it reduces its take on the Colorado River.

Written Contracts or other Proof

The following is a list of major QSA-related agreements and actions pertinent to water supply reliability in San Diego County along with the date that each were executed:

- **Passage of SB 654 (Machado), SB 317 (Kuehl), and SB 277 (Ducheny) (September 2003).** In September 2003, California’s Governor signed three bills necessary to carry out the actions contained in the QSA and related agreements.
- **Quantification Settlement Agreement by and among Imperial Irrigation District, Metropolitan, and Coachella Valley Water District (October 10, 2003).** This Agreement and related agreements are intended to settle longstanding disputes regarding the priority, use, and transfer of Colorado River water, and to establish by agreement the terms for the further distribution of Colorado River water among agencies for up to 75 years. The agreement will also assist the agencies in meeting their water demands within California’s apportionment of Colorado River water by identifying the terms, conditions, and incentives for the conservation and distribution of Colorado River water within California.
- **Colorado River Delivery Agreement among the Department of the Interior, Coachella Valley Water District, Imperial Irrigation District, Metropolitan, and Water Authority (October 10, 2003).** This Agreement provides federal authorization for water deliveries pursuant to the QSA. With approval by the Secretary of Interior, the Interim Surplus Guidelines have been reinstated.
- **Allocation Agreement among the United States, Metropolitan, Coachella Valley Water District, Imperial Irrigation District, the Water Authority, and the San Luis Rey Indian Water Rights Settlement Parties (October 10, 2003).** This Agreement allocates water from the lining of the AAC and CC and assigns the right to 77,700 AF of conserved water per year from Metropolitan to the Water Authority in accordance with the Agreement.

Federal, State, and Local Permits/Approvals

- **Final Program Environmental Impact Report (June 2002) for Implementation of the Colorado River Quantification Settlement Agreement.** In June 2002, the three California Colorado River agencies (Metropolitan, IID, and CVWD) certified the Program Environmental Impact Report (PEIR) for the QSA.
- **Addendum to Final PEIR for Implementation of the Colorado River Quantification Settlement Agreement (October 2003).** The Addendum to the Final PEIR was approved by the agencies during the months of September and October 2003. The modifications to

the QSA require only minor changes to the evaluation in the certified Final PEIR to make it adequate under CEQA and do not require preparation of a subsequent EIR pursuant to CEQA.

- **Conservation Agreement among the Bureau of Reclamation, Imperial Irrigation District, Coachella Valley Water District, and San Diego County Water Authority (October 10, 2003).** This agreement is for the purpose of establishing the rights and obligations of the parties to implement the provisions of the Species Conservation Program. IID has commenced development of a habitat conservation plan (HCP) in accordance with the Federal and California Endangered Species Act, related to implementation of water conservation projects identified in the QSA. The HCP is not expected to be completed for up to three years after the execution of the QSA and the parties desire to participate with the Bureau of Reclamation in the implementation of the Species Conservation Program for the purpose of obtaining incidental take authorization pending completion of the HCP.

Colorado River Supply Conditions

The Colorado River watershed is experiencing the fifth consecutive year of a drought that has impacts throughout western United States. The period since 1999 is now officially the driest in the 98 years of recorded history of the Colorado River. The basin states are having discussions with the Bureau of Reclamation on potential drought management programs to reduce the risk of shortages. Metropolitan staff is involved in these talks. Some of the programs being considered are re-operation of the system to minimize evaporation, system losses, and potential for a drought water bank in Lake Mead. It should be noted that according to the "law of the river," California has a higher priority to supplies in times of shortages, but will need to take steps to ease the drought impacts on the other western states. Water Authority staff is evaluating imported water supply conditions to determine if the Water Authority needs to take additional steps to secure supplies to minimize risk of shortages.

Integrated Resources Plan

Metropolitan has released, for public review, a draft update to its 1996 Integrated Resources Plan (IRP). The update discusses supply reliability associated with execution of the QSA and includes a buffer supply to mitigate against the risks associated with implementation of local and imported supply programs. The planning buffer identifies an additional increment of water that could be potentially developed if other supplies are not implemented as planned. As part of implementation of the planning buffer, Metropolitan should evaluate supply development annually to ensure that the region is not over-developing supplies. If managed properly, the planning buffer will help ensure that the southern California region, including San Diego County, will have adequate supplies to meet future demands.

Future supply reliability relies not only upon actions by Metropolitan to secure reliable imported supplies, but local agencies developing local projects identified in the future resource mix. Table 3 demonstrates the diverse mix of resources and storage projects planned within Metropolitan's service area, and include the planning buffer. The information contained in the table is from Metropolitan's December 2003 draft IRP update.

Table 3
Summary of Metropolitan's IRP Update Dry-Year Targets (AF)

	2010	2020	2025
Conservation	865,200	1,027,600	1,106,900
Local Production ¹	1,808,966	1,911,193	1,922,608
Total Local Projects ²	410,000	750,000	750,000
Groundwater Conjunctive Use	275,000	300,000	300,000
State Water Project	463,000	650,000	650,000
Colorado River Aqueduct	1,001,000	985,000	1,005,000
CVP/SWP Storage and Transfers ²	300,000	550,000	550,000
MWD Surface Storage ³	620,000	620,000	620,000

Source: Draft IRP Update, Metropolitan Water District, December 2003.

¹ Includes groundwater and surface production and imported supplies from the LA Aqueduct.

² Target includes 250,000 acre-foot planning buffer in years 2020 through 2025. The amount of supplies shown are not necessary to meet demands in those years, but must be considered in order to be available to mitigate for risks associated with supplies not being development. Metropolitan should evaluate supply implementation annually and adjust the amount of planning buffer accordingly.

³ Represents annual production, not the total storage capacity.

APPENDIX D

AGREEMENT NO. 29806

NEW LRP

RINCON DEL DIABLO RECYCLED WATER PROGRAM

LOCAL RESOURCES PROGRAM AGREEMENT

BETWEEN

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA,

SAN DIEGO COUNTY WATER AUTHORITY,

AND

RINCON DEL DIABLO MUNICIPAL WATER DISTRICT

NEW LRP
RINCON DEL DIABLO RECYCLED WATER PROGRAM
LOCAL RESOURCES PROGRAM AGREEMENT
BETWEEN
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA,
SAN DIEGO COUNTY WATER AUTHORITY,
AND
RINCON DEL DIABLO MUNICIPAL WATER DISTRICT

THIS AGREEMENT is made and entered into as of March 27, 2000 by and among The Metropolitan Water District of Southern California (Metropolitan), San Diego County Water Authority (Authority), and Rincon del Diablo Municipal Water District (RDDMWD). Metropolitan, Authority and RDDMWD may be collectively referred to as "Parties" and individually as "Party".

RECITALS

- A. Metropolitan was incorporated under the Metropolitan Water District Act (Act) for the purpose of developing, storing, and distributing water for domestic and municipal purposes;
- B. The Act empowers Metropolitan to acquire water and water rights within or without the state; develop, store and transport water; provide, sell and deliver water at wholesale for municipal and domestic uses and purposes; set the rates for water; and acquire, construct, operate and maintain any and all works, facilities, improvements and property necessary or convenient to the exercise of the powers granted by the Act;
- C. Authority, as a member public agency of Metropolitan under the Act, is a wholesale purchaser within its service area of water developed, stored, and distributed by Metropolitan;
- D. RDDMWD is a member public agency of Authority and provides domestic water and non-domestic water services entirely within Authority's service area;
- E. RDDMWD is empowered under Section 71592 of the Water Code to enter into contracts necessary to carry out its powers and purposes;
- F. Metropolitan's water supply and demand projections for its service area, including that encompassed by Authority and RDDMWD, show that additional sources of supplemental water must be developed to meet future needs;

- Q. The Parties believe that distribution and use of recycled water by the Project will benefit the local community within RDDMWD and the region served by Metropolitan;
- R. The Project, when fully developed, is estimated as being capable of delivering 648 acre-feet per year of tertiary treated recycled water for landscape irrigation purposes.

NOW, THEREFORE, in consideration of the promises and covenants hereinafter set forth, the Parties do agree as follows:

Section 1: Definitions

The following words and terms, unless otherwise expressly defined in their context, shall be defined to mean:

- 1.1: "Allowable Yield" shall mean the amount of Recycled Water that is delivered to End Users by RDDMWD from the Project in any given Fiscal Year and eligible to receive Metropolitan's financial assistance. Allowable Yield, measured in acre-feet, shall not exceed Ultimate Yield and shall exclude any Recycled Water Metropolitan reasonably determines will not reduce Authority's or RDDMWD's demand for Metropolitan's imported water.
- 1.2: "End User" shall mean each user that purchases Recycled Water furnished by this Project.
- 1.3: "LRP Contribution" shall mean the financial contribution in dollars per acre-foot Metropolitan pays for Allowable Yield to RDDMWD through Authority for monthly billing purposes as outlined in Exhibit B, incorporated herein by this reference. The LRP Contribution shall commence in Fiscal Year 2000-2001.
- 1.4: "Fiscal Year" shall mean a Metropolitan Fiscal Year that begins on July 1 and ends on June 30.
- 1.5: "Project" shall mean the "Rincon del Diablo Recycled Water Program" being designed and developed by RDDMWD, described in Exhibit A and incorporated herein by this reference, consisting of additional capital distribution facilities capable of producing the Allowable Yield. RDDMWD shall notify Metropolitan prior to making any changes to the Project which require new environmental documentation other than an addendum to the existing environmental documentation. After reviewing the proposed change and associated environmental documentation, Metropolitan shall inform Authority and RDDMWD of Metropolitan's decision to include or exclude the change to this Agreement.
- 1.6: "Ultimate Yield" is originally established as 648 acre-feet per Fiscal Year and is subject to the reduction provisions outlined in Exhibit C, incorporated herein by this reference.

- 3.6: Authority and RDDMWD shall assist Metropolitan in its effort to forecast future Project production.
- 3.7: RDDMWD shall notify and provide Metropolitan with a copy of relevant agreements if RDDMWD decides to convey water using Project facilities to any party that is not an End User.

Section 4: Billing Process

- 4.1: Metropolitan shall pay RDDMWD, through Authority, the LRP Contribution specified in Exhibit B for Allowable Yield. No payment under this Agreement shall be made by Metropolitan unless otherwise approved in writing by Metropolitan for: (1) groundwater, surface water, or potable water deliveries to supplement the Recycled Water system; or (2) Allowable Yield from other projects with active or terminated LRP or Local Projects Program agreements.
- 4.2: RDDMWD shall notify Metropolitan in writing no less than 30 days prior to the start of Project operation.
- 4.3: RDDMWD shall invoice Metropolitan monthly for the LRP Contribution based upon the Allowable Yield billed to the End Users during the previous month. Metropolitan shall pay RDDMWD for invoiced LRP Contribution pursuant to Sections 4.1 and 4.5 by means of a credit included on the next water service invoice issued to Authority.
- 4.4: Upon receiving the Metropolitan invoice, Authority shall include the full amount of the LRP Contribution for the Allowable Yield received from Metropolitan as a credit on its next water service invoice to RDDMWD.
- 4.5: Unless otherwise provided for in this Agreement, all invoicing, billing and crediting processes shall be in accordance with the rules and regulations established from time to time by Metropolitan as reflected in Metropolitan's Administrative Code.

Section 5: Record Keeping and Audit

- 5.1: RDDMWD shall establish and maintain accounting records of Recycled Water purchases from Escondido, Project deliveries and Allowable Yield. In addition, RDDMWD shall collect and retain records of the total annual amount of water conveyed outside of RDDMWD's service area using Project facilities. Accounting for the Project shall utilize generally accepted accounting practices and be consistent with the terms of this Agreement.
- 5.2: RDDMWD shall collect and make available to Metropolitan upon request, records of Recycled Water purchases from Escondido, Project deliveries and Allowable Yield for each Fiscal Year of Project operation and retain records of measurements taken by meters

Section 8: Notice

Any notice, payment or instrument required or permitted to be given hereunder shall be deemed received upon personal delivery or 24 hours after deposit in any United States post office, first class postage prepaid and addressed to the Party for whom intended, as follows:

If to Metropolitan:

The Metropolitan Water District of Southern California
Post Office Box 54153
Los Angeles, California 90054-0153

Attention: General Manager

If to Authority:

San Diego County Water Authority
3211 Fifth Avenue
San Diego, California 92103-5718

Attention: General Manager

If to RDDMWD:

Rincon del Diablo Municipal Water District
1920 North Iris Lane
Escondido, California 92026

Attention: General Manager

Any Party may change such address by notice given to each of the other Parties as provided in this section.

Section 9: Successors and Assigns

This Agreement shall inure to the benefit of and be binding upon the successors and assigns of the Parties hereto. This Agreement and any portion thereof shall not be assigned or transferred to any entity not an original Party to this Agreement, nor shall any of the duties be delegated, without the express written consent of all Parties. Any attempt to assign or delegate this Agreement or any of the obligations or benefits of this Agreement without the express written consent of all Parties shall be void and of no force or effect.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement effective as of the date first hereinabove written.

APPROVED AS TO FORM:

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

N. Gregory Taylor
General Counsel

Ronald R. Gastelum
General Manager

By:

McCuely
Deputy General Counsel

By:

Stephen M. Arakawa
Stephen N. Arakawa, Acting Manager
Water Resource Management Group

APPROVED AS TO FORM:

SAN DIEGO COUNTY WATER AUTHORITY

By:

James J. Taylor
Deputy General Counsel

By:

[Signature]
Director of Water Resources

APPROVED AS TO FORM:
REDWINE & SHERRILL

RINCON DEL DIABLO MUNICIPAL
WATER DISTRICT

By:

[Signature]
General Counsel 3/14/00

By:

[Signature] 3-14-00
General Manager

o:\clustr10\mmshared\contract\agree\29806.doc

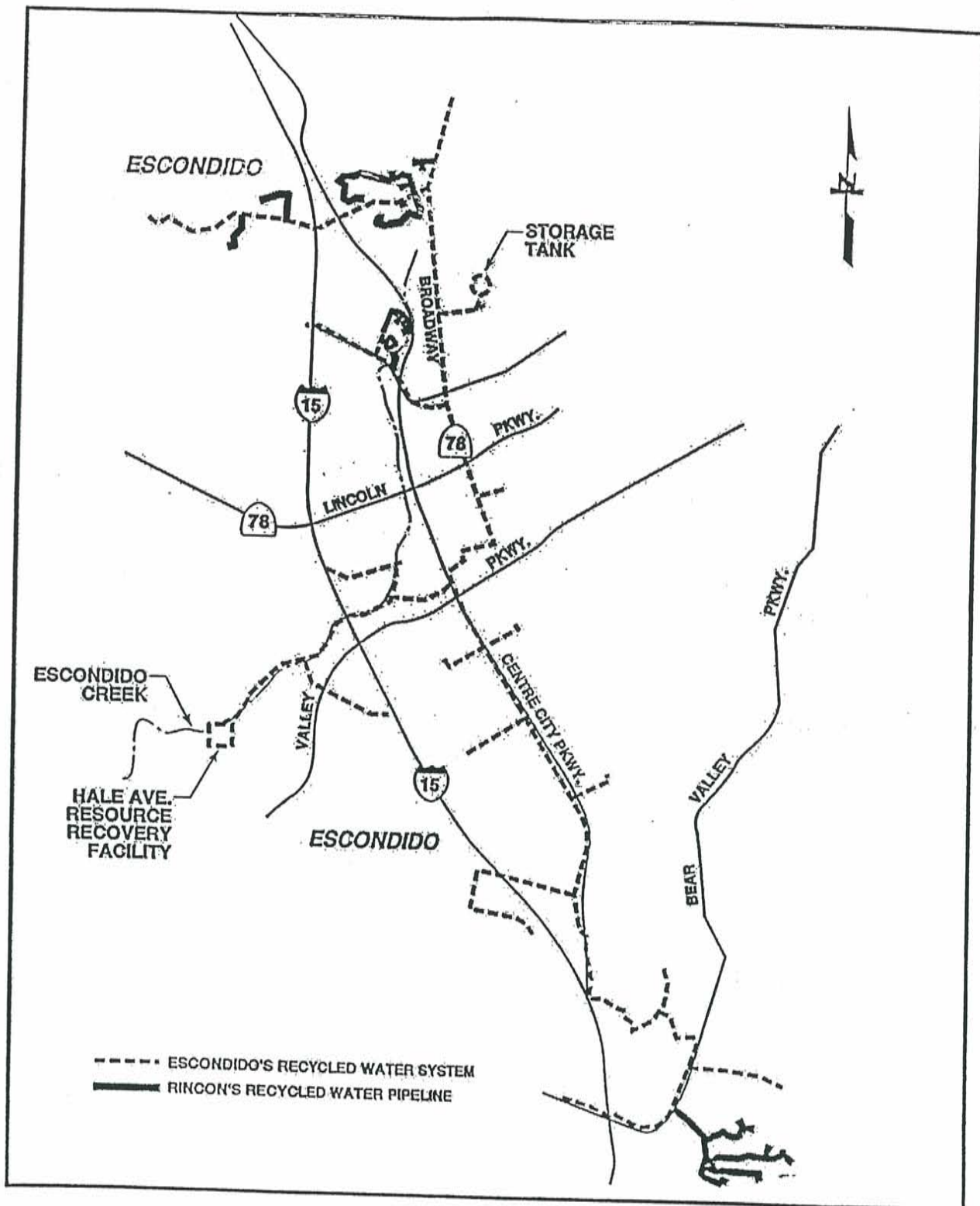


Figure 1
RINCON DEL DIABLO RECYCLED WATER PROJECT

APPENDIX E

JOINT PARTICIPATION AGREEMENT FOR
DEVELOPMENT OF LOCAL RECYCLED WATER SUPPLIES
BETWEEN
THE SAN DIEGO COUNTY WATER AUTHORITY AND
THE RINCON DEL DIABLO MUNICIPAL WATER DISTRICT

This Agreement (Agreement) is made this 18th day of Sept, 2002, between the San Diego County Water Authority "Authority", organized and existing under the County Water Authority Act of the State of California (Chapter 45, Water Code Appendix and amendments thereto), and the Rincon del Diablo Municipal Water District "Agency", a municipal water district organized and operating pursuant to the Municipal Water District Law of 1911, California Water Code section 71000 *et seq.*, with respect to the following facts:

RECITALS

1. Authority is empowered under the County Water Authority Act ("Act") to develop, store, transport, provide, sell and deliver water for beneficial uses and purposes;
2. Agency is a public member agency of the Authority under the Act, and is a wholesale purchaser of water from the Authority, and seller of water for beneficial use;
3. Agency has entered into an agreement with the City of Escondido to purchase recycled water from the Hale Avenue Resource Recovery facility (HARRF) via the Escondido Regional Reclaimed Water Project Agency;
4. Agency is currently planning and desires to construct additional capital facilities collectively known as the Rincon del Diablo Recycled Water Program (Project). Upon completion, this Project will: Distribute, for beneficial use, additional recycled water, which will minimize present and future disposal of wastewater as a waste product from the HARRF, in a cost-effective manner for its customers, thereby reducing the need for additional water that otherwise must be delivered from the Authority's aqueduct system;
5. Authority's water supply and demand projections for its service area, including that encompassed by the Agency, show that additional sources of water must be developed to meet future needs;
6. Authority and Agency have determined that it is mutually beneficial for cost-effective local water reclamation projects to be developed to reduce reliance on Authority's imported water supplies;
7. Authority has adopted an Urban Water Management Plan and programs designed to encourage development of an additional 50,000 acre feet per year of beneficially used recycled water throughout its service area over the next 20 years,

thereby reducing the need for additional water that otherwise must be delivered from Authority's water supply system;

8. Authority desires to assist in increasing production and distribution of recycled water by contracting with the Agency to contribute all or a portion of Authority's estimated avoided cost of procuring additional water supplies on a periodic basis, to the extent necessary to make the production of recycled water financially feasible;

9. The recycled water project planned within the service area of the Agency will correspondingly reduce demand of the Agency for water from the Authority.

NOW, THEREFORE, in consideration of these facts, the parties agree as follows:

Article 1: Definitions

The following words and terms, unless otherwise expressly defined in their context; shall be defined to mean:

1.1 "Recycled Water" shall mean treated wastewater which is not usable for human consumption but, subject to water quality standards and regulatory agency approval, is usable for designated non-potable, beneficial use purposes, such as landscape irrigation and industrial processes, which is measured in acre-feet.

1.2 "Project" shall mean the project for the production of Recycled Water, developed under this Agreement, as described in Exhibit A.

1.3 "Agency" shall mean the public agency that owns and operates, or proposes to own and operate, the Project. The Agency may or may not be a member agency of the Authority.

1.4 "End User" shall mean each of the ultimate users that purchased the Recycled Water produced by the Project.

1.5 "Project Sponsor" shall mean the member agency of the Authority within whose service area the Project is located.

1.6 "Beneficial Use" shall mean reuse of water, by an End User, that is purchased from Recycled Water furnished by this Project.

1.7 "Recycled Water Rate" shall mean the water rate used to calculate revenues from recycled water sales. If the Agency is a retail water agency, the Recycled Water Rate is the higher of: 1) Agency's recycled water rate(s) for sales to End Users, or 2) eighty-five percent (85%) of the lowest applicable potable water rate of the Agency for the End User served by the Project. If the Agency is not a retail water agency, the Recycled Water Rate is the higher of the Agency's rate for each class of recycled water service, or 85% of the Agency's Sponsor's rate for each equivalent class of potable water service. For purposes of this definition, applicable potable water rate shall mean the commodity charge for the class of service associated with the End User being served by the Project.

1.8 "Allowable Project Yield" shall mean the actual amount of recycled water, which is sold and delivered to the End Users by the Project in any given year, and which is used within the Authority's service area. "Yield" shall exclude any non-revenue generating Recycled Water, which is used for a Recycled Water system or On-site Facility for landscape irrigation, filter backwash, cooling and/or process water use, and those uses that will not reduce a demand for potable water from the Authority. Yield shall exclude any potable water used to supplement or replace the Recycled Water provided to the End Users. Unless otherwise approved in writing by the Authority, Allowable Yield shall also exclude: (1) groundwater, surface water, or potable water deliveries to supplement the Recycled Water system; and (2) Allowable Project Yield from other projects with active or terminated RWDF Program Agreements.

1.9 "Project Revenues" shall mean revenues from recycled water sales, plus any other revenues, which offset the costs of recycled water production or distribution. These additional revenues may include Metropolitan Water District of Southern California (MWD) incentives (such as Local Resources Program incentives), federal and state grants, contributions from other agencies, connection fees, capacity charges, meter charges, special assessments, interest earnings on debt service reserves, and tax revenues.

1.10 "Project Costs" shall mean the actual costs to produce an acre-foot of recycled water by the Project and is comprised of three components: Annualized Capital Costs, Annualized Operation and Maintenance Costs and Annualized Replacement Costs. Project Costs exclude the cost of existing facilities, the cost of those Project components necessary to meet National Pollutant Discharge Elimination Permit (NPDES) and Waste Discharge Permit requirements, the costs of primary and secondary treatment facilities, and the cost of those Project components funded by grants or contributions from private or public agencies. Project Costs may include costs incurred by the Agency for the retrofitting of private water systems to the extent necessary to permit the attainment of Project Yield.

1.11 "Capital Cost Values" shall mean the actual cost of the development of the tertiary water treatment facility, the distribution system, and the debt service associated with the construction of these facilities.

1.12 "RWDF" shall mean the Authority's Reclaimed Water Development Fund Program.

Article 2: Development and Operation of the Project

2.1 Elements of Project The Project shall include all or a portion of the following elements: transmission, storage, tertiary treatment, pumping and other facilities necessary for the production, storage and delivery of Recycled Water, as described in the "Project Description," attached hereto as Exhibit A and by reference made a part of this Agreement.

2.2 Firm Source of Water Agency warrants that it has a firm source of wastewater to produce Recycled Water to operate the Project described herein.

2.3 Authority Over Sewer Service Agency warrants that it has the authority to provide sewer, water or other services as necessary to carry out the Project, or has a contract with the provider of sewer, water, or other service, in areas tributary to the Project, to obtain effluent from which Recycled Water will be produced. Agency further warrants that the residences, businesses, and industries in the area from which Recycled Water is to be derived are or can be required to discharge wastewater for treatment.

2.4 Right to Sell Water Agency warrants that it is able and has a right to sell such Yield as is produced by the Project.

2.5 Construction, Design and Costs Agency shall be solely responsible for the design, environmental proceedings and compliance, right-of-way acquisitions, permits, construction and any capital costs of the Project or any modifications thereof. Authority shall have no responsibilities, obligations or liabilities regarding the design, environmental proceedings and compliance, right-of-way acquisitions permits, or construction of the Project or any modifications thereof. Nor shall Authority be responsible for any capital costs of the Project.

2.6 Owner of Project Agency shall be designated as the sole and exclusive owner of all Project facilities, except for those portions, if any, constituting a portion of the Authority's distribution system or installed within the boundaries of End Users' properties. Authority shall have no ownership right, title, security interest, or other interest in any Project facilities, nor any rights, duties, or responsibilities for operation and maintenance thereof. The sole obligation of Authority shall be to pay the Contribution Rate for the Yield generated by the Project.

2.7 Operation of Project Agency shall be solely responsible for the operation and maintenance of all components of the Project, including providing or obtaining an adequate wastewater supply and distributing and delivering Recycled Water to each End User's meter.

2.8 Meters Metering devices shall be installed and owned, operated and maintained by Agency for the purpose of measuring Project Yield. Each meter shall be read in accordance with the Agency's regular billing cycle for purposes of billing and accounting between the parties to determine at the beginning of each billing cycle the quantity of Recycled Water billed to End Users during the preceding billing cycle. Agency shall install metering devices at the Recycled Water storage reservoirs to determine the quantity of potable water, if any, blended with Recycled Water and delivered to End Users during each billing cycle. The Agency will be responsible for ensuring that all metering devices are properly installed, calibrated, and maintained. The Agency shall be solely responsible for the accuracy of the meter readings. The Authority reserves the right to review the meter readings and may request independent meter accuracy testing. The costs of any independent meter test will be divided equally between the Authority and the Agency.

2.9 Maintenance of Project Agency agrees to properly operate, maintain, replace as necessary, and inspect the facilities comprising the Project, regularly and in accordance with all applicable state and federal laws, rules, regulations, and guidelines for the term of this Agreement.

2.10 Operating Principles Agency agrees, at all times during the term of this Agreement, to use its best efforts to operate the Project facilities in accordance with generally accepted professional standards and maintenance and operation principles and in such manner as to provide service to existing and future End Users on a fair and equitable basis.

2.11 Staffing Agency shall provide sufficient qualified personnel to properly operate and maintain the Project facilities. Such personnel shall meet applicable certification requirements of pertinent regulatory agencies.

2.12 Compliance with Regulatory Requirements and Laws Agency shall ensure, either directly or by contract with End Users, that all Recycled Water produced and delivered by the Project is used in compliance with all applicable federal, state and local statutes, ordinances, regulations and other requirements, and shall further ensure that connections to the Recycled Water system are properly designed and constructed. Additionally, the Agency must demonstrate that appropriate regulatory and public health permits have been, or will be, obtained.

2.13 California Environmental Quality Act Agency shall ensure that the Project complies with the provisions of the California Environmental Quality Act (CEQA). The Authority shall not be obligated to make any payments for Recycled Water produced and/or delivered by any component of a Project that does not comply with CEQA requirements.

Article 3: Calculation of Contribution Rate and Method of Payment

3.1 Maximum Contribution Rate Is currently set at \$100 per acre-foot of Project Yield. The Maximum Contribution Rate may be adjusted periodically by the Authority Board of Directors, based upon the Authority's actual and projected costs of acquiring additional water supplies. Authority shall pay to Agency the Contribution Rate for Yield supplied by the Project, provided that unless agreed otherwise in writing, Authority shall not be obligated to make a contribution for Allowable Project Yield in excess of **539 acre-feet** in any one Authority fiscal year, nor shall Authority be obligated to contribute for any Recycled Water in advance of its delivery to End Users.

3.2 Contribution Rate For an acre-foot of Project Yield will be established annually by the Authority for each Project deemed eligible for RWDF incentives. The Contribution Rate will be determined based on the specific financial need of the Project and may be less than the Maximum Contribution Rate.

3.3. Calculation of Contribution Rate At the end of each fiscal year, the Authority will conduct a financial review of the Project to determine the Project's cumulative net

balance, (i.e. the difference between cumulative Project Revenues and cumulative Project Costs, for the coming fiscal year). The Project will be eligible to receive RWDF incentives if the cumulative net balance for the coming fiscal year is projected to be less than zero (i.e., if cumulative Project Costs exceed cumulative Project Revenues). The Contribution Rate for a Project will be established in such a manner as to maintain a cumulative Project balance of \$0, provided, however, that the Contribution Rate may not exceed the Maximum Contribution Rate. The Authority will include an allowance for foregone interest earnings in the calculation of the Project's cumulative net balance.

3.4 Addition of Earnings/Cost of Funds to Cumulative Net Balance For the purpose of computing the Cumulative Net Balance in any given fiscal year, there shall be added to Project Costs the annual cost of funds to the Agency for carrying any negative Cumulative Net Balance from the first day of the fiscal year the Project begins deliveries of Reclaimed Water to an End User through the last day of the fiscal year under consideration. For the purpose of computing the Cumulative Net Balance in any given fiscal year, there shall be added to Project Revenues the estimated earnings of the Agency on any positive Cumulative Net Balance from the first day of the fiscal year the Project begins deliveries of Recycled Water to an End User through the last day of the fiscal year under consideration. See example below:

	<i>First Year of Delivery</i>	<i>Second Year of Delivery</i>	<i>Third Year of Delivery</i>
Project Revenue	\$100	\$400	\$1,200
Project Cost	<u>\$500</u>	<u>\$500</u>	<u>\$500</u>
Balance	<u>(\$400)</u>	<u>\$100</u>	<u>\$700</u>
Cumulative Net Balance	(\$400)	(\$520)	\$154
Cost of Funds/Interest Adjustment*	<u>(\$20)</u>	<u>(\$26)</u>	<u>\$8</u>
Adjusted Cumulative Net Balance	(\$420)	(\$546)	\$162

*Assumes 5% of Cumulative Net Balance

3.5 Return of Excess Contributions In the event that the Project has a positive cumulative net balance at the end of any fiscal year, the Agency will return to the Authority the amount of any contributions made during that year so as to achieve a cumulative net balance of \$0. The policy of the Authority is not to provide contributions for projects that can maintain a positive Cumulative Net Balance without an Authority Contribution.

3.6 Method of Invoicing and Payment Agency shall invoice Authority monthly for the Project Yield, based upon the quantities billed to End Users during the previous month. Billings shall be based upon meter reads at each and every connection of the Project to an End User.

RWDF incentives will be paid monthly based on the actual Project Yield during the previous billing cycle and the Actual Contribution Rate for the Project. Incentives to the member agencies will be provided in the form of a credit on their monthly Statement of Water Deliveries and Charges. If the Agency receiving the credit is not an Authority member agency, a reimbursement check will be issued directly to the Agency by the Authority.

3.7 Financial Assistance Program (FAP) Reimbursement The Agency must reimburse the Authority for any funds received under the Financial Assistance Program (FAP) in accordance with FAP guidelines. Any FAP reimbursements owed the Authority may be deducted from the Agency's monthly RWDF incentive payments.

3.8 One-Time Capital Contribution A one-time capital contribution in lieu of annual contributions may be considered by the Authority Board in cases of extreme hardship. Such contributions are generally discouraged and, if considered, may be subject to terms and conditions more stringent than those set forth in this Agreement.

3.9 Eligible Project Costs

"Annualized Capital Costs" shall be computed using only the following incurred costs by the Agency for the Project:

- Design and construction management service fees.
- Construction costs of the Project facilities; these costs may include a recycled water distribution system of varying diameter recycled water pipeline, pump stations, and storage facilities. The tertiary treatment facilities will not be used for wastewater disposal purposes.
- Agency administration of the Project design, construction, and start-up costs. These costs represent a reasonable overhead allocation that must be agreed upon with the Authority.
- Land, right-of-way and easements for the Project and Recycled Water distribution system.
- Environmental documentation and mitigation measures directly related to the implementation or operation of the Project and required to comply with applicable environmental permits and laws, including but not limited to the California Environmental Quality Act, National Environmental Policy Act, and the California and Federal Endangered Species Acts. Environmental documentation costs shall commence with the Notice of Preparation and conclude with the filing of the Notice of Determination.
- All other costs not specified in the above section shall be excluded, unless previously approved by the Authority.

- All contributions (e.g. MWD and Authority incentives, grants, fees, charges, etc.) shall be offset "or netted" against the capital cost values for the purpose of computing the Annualized Capital Costs component.

"Operation and Maintenance Costs" for the applicable fiscal year shall be computed using only the following incurred costs by the Agency for the Project:

- Professional consulting service fees for Project operation, maintenance and audit.
- Agency labor costs and/or contract costs (rate based on current market rate.)
- Chemicals and supplies for the Project operation and maintenance.
- Net electrical energy (recovery energy shall be deducted from energy purchased) for eligible facilities and distribution system operations. The Authority shall not pay for electrical energy costs if the Agency fails to install metering devices.
- Contractor services and supplies for Project facilities, operation, and maintenance and repair to maintain reliable system operation and achieve regulatory compliance.
- Monitoring required by permits, including water quality sampling and analysis of Recycled Water produced by the Project.
- All other costs not specified in the above section shall be excluded, unless previously approved by the Authority.
- All contributions shall be offset against operating cost values for the purpose of computing the Operation and Maintenance Costs component.

"Replacement Costs" shall be computed using incurred costs for the following:

- Replacement of Project parts costing less than or equal to an indexed cost calculated as follows: \$100,000 times (ENRCCI/Base Year ENRCCI) – ENRCCI is the Engineering News Record Construction Cost Index for the Los Angeles area for July of each applicable Fiscal Year.
- Salvage value of replaced parts shall be offset against replacement costs.
- All contributions shall be offset against replacement cost values for the purpose of computing the Replacement Costs component.
- All other costs not specified in the above section shall be excluded, unless previously approved by the Authority.

Note: the Authority may request explanations or a review of the detailed costs included in the Agency's submittal of eligible costs, however, the Authority's determination as to the validity of the costs is final.

3.10 Project Revenue Sources

"Annual Revenue Sources" shall consist, but not be limited to, the following sources:

- Revenues from reclaimed water sales, plus any other revenues, which offset the costs of reclaimed water production or distribution.
- MWD Local Resources Program (LRP) incentives.
- Federal and state grants awarded to an Agency's program.
- Agency connection fees, capacity charges, meter charges, special assessments, and tax revenues.
- Interest earnings on debt service.
- All other revenues not specified in the above section, but obtained after the first fiscal year of operation, shall be included in the total revenue calculation of each subsequent fiscal year.

Article 4: Annual Financial Review and Record Keeping

4.1 Annual Review The Authority will conduct an annual review of Project Costs and Revenues to determine the Contribution Rate for the Project. The Agency must submit to the Authority Exhibit B (the Internal Control Questionnaire) and Exhibit C (Reclaimed Water Development Fund Expenditure and Revenue Worksheets), which require providing estimated Project Costs and Revenues for the current and upcoming fiscal year. The Agency will also provide actual Project Costs and Revenues for the prior fiscal year. These forms will be submitted by December 31st of each year. For the purposes of projecting future year costs, inflation factors and interest rates will be determined by the Authority. The Authority will mail the appropriate reporting forms to the Project Sponsor by October 31st of each year. The Agency will submit all requested materials to the Authority no later than three weeks from the date of the initial request. The Authority shall have the right to review the accounting and Project records of the Agency to verify Project Costs and Project Revenues and may request an independent audit of those records.

Notwithstanding the formulae described above, the Contribution Rate for any year may be adjusted: (a) to reflect the results of any audit by the Authority of the actual Project Costs and Project Revenue during previous Project operation years; and (b) to reduce the Contribution Rate by an amount equal to the Agency's obligation to repay any sum owed to Authority under the Financial Assistance Program for reclamation planning studies for this and other Agency Projects.

4.2 Provision of Additional Operating Data Agency shall supply the Authority, at the Authority's request, and in a timely manner, monthly Project operating data. This data will include, but is not limited to, Recycled Water production, reuse, water quality, and projection data.

4.3 Record Retention The Agency shall establish and maintain accounting records of all revenue sources received and costs incurred for the construction, operation and maintenance, and replacement parts of the Project as described in Section 3.8 - Eligible Project Costs, and Section 3.9 - Project Revenue Sources. Accounting for the Project shall utilize generally accepted accounting principles and be consistent with the terms of this Agreement.

The Agency's Project accounting records must clearly distinguish all costs for the Project from the Member Agency's other water production, treatment, and distribution costs. These records shall also be adequate to determine Recycled Water and Project Yield in order to accomplish all cost calculations contemplated within the context of the Project.

The Agency shall establish and maintain accounting records of all contributions including grants that offset "Eligible Project Costs."

The Agency shall collect Recycled Water and Project Yield data for each Fiscal Year of the Project and retain records of that data based on metering requirements. In addition, the Member Agency shall collect and retain records of the total annual amount of water conveyed outside the Member Agency's service area using Project facilities. The Agency shall keep all Project records for at least three years following the termination of this Project.

The Authority shall have the right to audit Recycled Water and Project Yield data relevant to the terms of this Agreement for a period of three Fiscal Years following termination of this Agreement. The Authority may elect to have such audits conducted by its staff or by others, including independent accountants or engineers, as designated by the Authority. The Agency shall make available for inspection to the Authority or its designee, upon 30 days advance notice, all records, books and other documents related to the determination of Allowable Project Yield. Based on the results of any independent audit, an adjustment for over- or underpayment of Project Yield for each applicable Fiscal Year shall be paid by the Authority or the Agency within one year of determination after such adjustment. The costs of any independent audit shall be equally divided between the parties.

Article 5: Performance Provisions

The Authority reserves the right to terminate the Project if construction has not commenced or the Allowable Project Yield is not delivered by a mutually agreed upon date (subject to bi-annual review). Additionally, if the Allowable Project Yield does not meet its projected target, the Authority reserves the right to reduce its Contribution Rate by a factor equal to the percentage shortfall of the actual Allowable Project Yield to the Agency's projected targeted Allowable Project Yield.

Article 6: Term and Amendments

The maximum term of this Agreement shall be twenty-five (25) years from the date the Project commences delivery of Recycled Water to an End User. In the event that for any year the Contribution Rate equals zero or less, this Agreement shall not be terminated, and no funds shall be owed to the Authority by the Agency, it being the purpose of this Agreement that the contributions made to the Agency shall reflect the financial need of the Project.

In the event of an Agreement breach, the Authority reserves the right to cease advancing current and future funds and may seek reimbursement for previously

advanced funds. Additionally, the breach may prohibit the Agency from participating in any future cooperative Agreements with the Authority.

This Agreement may be modified through bilateral agreement between the parties. Any modifications made to this Agreement shall be confirmed in writing prior to performance of the change.

Nothing contained herein shall be deemed to modify Authority obligations, if any, established by law or contract to supply water to the Agency for domestic and municipal use within the Authority's service area.

Article 7: Hold Harmless and Liability

The Member Agency agrees to hold the Authority harmless from any and all liability, including, but not limited to, liability due to water quality, which may arise out of the Agency's respective participation in the construction, maintenance and operation of the Project or out of ownership interest the Agency may acquire in the Project, and will save and defend the Authority and its officers, agents, employees, and each member of its Board of Directors free from any claims for injury, including death or damage to persons or property arising out of the Agency's respective roles in the construction, maintenance, operation, or ownership of the Project. Such indemnity shall include all loss related to any claim made, whether or not a court action is filed, and shall include attorney fees, administrative and overhead costs, engineering and consulting fees and all other costs related to or arising out of such claim of liability.

Article 8: Notice

Any notice, payment or instrument required or permitted to be given hereunder shall be deemed received upon personal delivery or 24 hours after deposit in any United States post office, first class postage prepaid and addressed to the party for whom intended, as follows:

If to Authority:

San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123
Attn: General Manager

If to Agency:

Rincon del Diablo Municipal Water District
1920 N. Iris Lane
Escondido, CA 92026
Attn: General Manager --

Any party may change such address by notice given to each of the other parties as provided in this section.

Article 9: Successors and Assigns

This Agreement shall inure to the benefit of and be binding upon the successors and assigns of the parties hereto.

Article 10: Severability

The partial or total invalidity of one or more sections of this Agreement shall not affect the validity of this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement effective as of the date first hereinabove written.

SAN DIEGO COUNTY
WATER AUTHORITY

By: 
General Manager

APPROVED AS TO FORM:

By:  Deputy
General Counsel

RINCON DEL DIABLO MUNICIPAL
WATER DISTRICT

By: 
General Manager

APPROVED AS TO FORM:

By: 
General Counsel